The MACDONALD COLLEGE Journal

Vol. I • No. 10

JUNE 1941

Farm · Home · School

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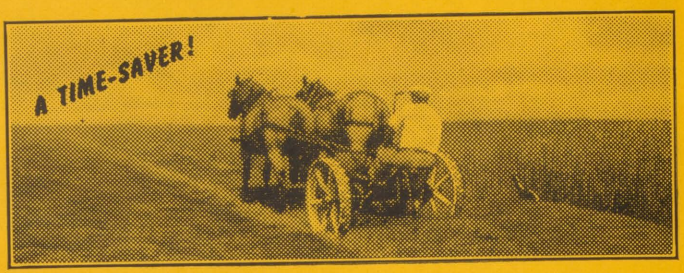

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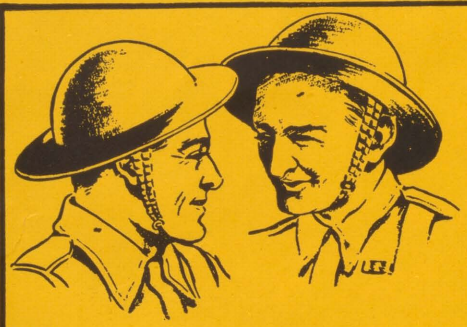

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EDITORIAL COMMENT

The setting of a minimum price for butter is just another step in the general movement toward regulation of prices of farm products.

The obvious reason for such regulation is to guarantee a fair price to the farmer. The real reason is to insure the required supply. The danger of a butter shortage last winter was the result of a comparatively low price in the previous summer. This danger prompted the setting of a maximum price which was in turn the direct forerunner of the present minimum price.

In normal times, the summer minimum price of butter varies sectionally and seasonally. It varies between surplus and deficit areas to allow for transportation costs. It varies from month to month to allow for storage costs from the peak period of production to periods of lower output. The minimum wholesale price was set in May at 29½c per pound for the Maritime Provinces, Quebec, Ontario and British Columbia. The price for Manitoba and Alberta was 27½c or two cents less. For Saskatchewan the price was 26½c or three cents less than that of the eastern provinces and British Columbia. For each of the summer months ½c per pound is added. The minimum summer price in eastern Canada varies from 30c in June to 32c in October.

The summer minimum will average 30.8c per pound for the five months from June to October inclusive in 1941. The actual price averaged 23.7c per pound at Montreal for the same five months in 1940. The minimum price is therefore seven cents above the actual price paid in 1940. This represents an increase of 30%. Few will begrudge the increase to the dairy farmers since it is well known that in recent years their type of farming has not been profitable.

The most important factor is the need for the cheese and manufactured milk products required overseas. An increased price of butter will give a needed stimulus to the whole dairy industry. With a good start this season indications now are that the required amount of cheese, manufactured milk products and butter all may be forthcoming.

Group Meetings at Macdonald

By the time this appears, the Summer Conference of Agronomes and the Rally of the Farm Forum Delegates at Macdonald College will have passed into history. Nothing but good can come of such meetings of these groups — each one in its own special way vitally concerned with the welfare of the farming industry. First we had the farmers themselves, whose welfare, more than that of any other class, determines the strength and stability of the nation, and who, for reasons beyond their control, were never more in need of guidance and support. Then we had an important section of the provincial agronomes, a group of men specially trained to serve the interests of the farmer in a technical and organizational way. These two groups met together with the College Staff, numbers of whom are engaged in carrying on an active programme of research into matters dealing with livestock feeding, better varieties of farm crops, improved methods of dealing with diseases and pests and, in general, in making a contribution to farm production, organization and marketing.

Each of these three classes can be of definite assistance to the others in the work each is attempting to do, and the Department is to be congratulated on its part in making this effort possible. The agronomes are to be congratulated on the keenness with which they have taken advantage of this opportunity to improve their efficiency; and the interest of the farmers, in realizing the desirability

(Please turn to page 8)

The Farmer in a War Economy

(The following extracts are from an important article by J. S. McDougall, M.A., Assistant Professor of Commerce, at Queen's University, in the April issue of the Canadian Banker.)

FOR a full twenty years the Canadian public has been aware of agricultural discontent as a vague rumbling in the background. In the last six months the sounds have moved up and taken on a more urgent note. Farm prices, not as a vague and distant part of the "Agricultural Problem" but as touching the daily lives of the people for whom the newspapers are written, sprang into the headlines. The price of butter touched off a discussion far more heated than can be explained by the amount of money involved. What is the real situation which underlies this controversy? What are the hidden tensions which have caused it to spring so suddenly into life?

Most city people have rather quaint ideas about the attraction of rural life. Driving out of town on a summer Sunday afternoon they see a man living in his own house, without rent to pay, able to grow a substantial part of his own subsistence, and they are carried away by the picture of an idyllic security and independence. Because they do not follow him around the clock and through the seasons they do not see the long hours he puts in, nor the never-ending quality of his labor, nor the very low returns on that labor after the essential farm supplies are bought. There is room for serious misunderstanding here. The farmer looks with envy on the high wages and short hours of the urban worker; the latter looks with envy on the farmer's security and independence, and neither sees that life isn't all beer and skittles for anyone.

If the farm is the paradise on earth which the city man is inclined to think it is, we may expect it to hold its natural increase and perhaps to draw population from the towns. The census contains the final answer to the relative attractiveness of farm life under the conditions existing in the 1920's. Once that basis is established it will be possible to appeal to the statistics of prices and income to see whether conditions on the farm have grown more or less attractive in the 1930's and '40's.

Lure of City

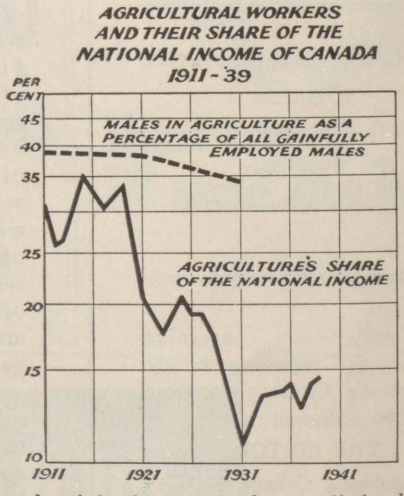
A detailed study of population movements between 1921 and 1931 has been made by Professor W. B. Hurd, of McMaster University. It is there shown that, between the two census dates, the rural areas lost about 71 per cent of their estimated natural increase and that the total movement of native born and of immigrants who first settled upon the land and later moved to the cities was about 670,000-700,000 persons. The 1920's, which we now look back on as a period of relative agricultural prosperity, was in fact one in which the return to rural workers was too low to hold them upon the land. Since it is the young people who move when rewards are unattractive the average age of the farm population rose. The young men who should have been the farmers of the succeeding decades were getting away from the land to city occupations where the work was easier and the pay larger.

It becomes therefore a matter of crucial interest to assemble what data are available to show the relative attractions of rural life since that date.

In that golden period of agricultural prosperity and expansion which ended with the first Great War the share of agriculture in the national income had not been far below the proportion which agricultural workers bore to the total of all the gainfully employed. At 1911, male farm workers were 38.9 per cent of all males gainfully employed. Over the five years 1911-15 agricultural income averaged 29.8 per cent of the national income. For the five years 1915-19 it averaged 32.8 per cent. It is far from being an equality, but by comparison with later developments it looks like paradise itself.

Decline of Farm Income

In 1920, agricultural income went into a decline from which it has never recovered. Agriculture's share of the national income remained consistently low in the 1920's; but bad as that was it was nothing to the agricultural distress of the 1930's. At the bottom of the depression farm workers comprising some 34 per cent of all males gainfully employed received about 7.1 per cent of the income paid out. The same story is told by the ratio comparison of the average annual earnings of wage workers in manufacturing industry with the average annual value of the wages and board of male farm labor. The pressure which was driving young men off the land in the 1920's had risen to a much greater intensity in the 1930's.



This trend might have raised very little discussion if the peace had been kept in Europe, and a chronic state of under-employment had persisted at home. A fortunate few

would have escaped to the cities but enough would have been kept behind to keep things going. But we are now in a war and driving toward the fullest possible utilization of all the labor in the country. In many occupations the shortage is already so serious that men are being paid to learn well-paid trades; within the next twelve months general shortage will be nearly inevitable.

It may be asked: Why has agriculture suffered so severely in the interval between the two wars? Is it fundamentally over-expanded so that it is socially necessary to put on the pressure of low earnings in order to force its workers to seek other occupations? This possibility cannot be denied in its entirety. The war of 1914-18 did disrupt the balance between agriculture and industry in the world economy and the effects persisted over the next twenty years.

Adjustment Still Possible

It would be all too easy to allow pessimism over the prospects of wheat, prospects over which we have a minimum of control, to blind us to another aspect of the problem which is almost completely within our control. It is not realized with sufficient clarity how vastly different are the policies followed by agriculture in depression from those followed by the rest of the community.

In the depressed years after 1928 farming alone of all the great industries of the country kept up the level of its productive effort. All the others contracted output, kept up their selling prices as best they could, and threw back the labor which such a policy made superfluous upon the general community to be maintained by relief or otherwise. From the social point of view there can be no comparison between the two policies. The production of useful goods in the largest possible quantities ought to be one of the primary ends of economic activity, and efforts to maintain a system of prices which blocks production ought to be unhesitatingly condemned. Both the steam railway industry and manufacturing industry followed policies of restriction. In the former, freight rates have been kept up, and employment allowed to fall; in the latter, prices have, with relatively unimportant exceptions, been maintained and employment allowed to vary. It has been suggested above that part of the distress of agriculture may be due to the fact that it is a declining industry. The railways are even more clearly in that position; but by rigidly limiting the numbers employed it has been possible to carry the average earning power per head of those who remained to new heights in the face of the distress of the industry which is providing these earnings.

Manufacturing industry provides a more heterogeneous sample; but the same tendencies are present. The number employed fell nearly as drastically as on the railways; but the real purchasing power of the earnings of those employed fell below the 1926 level only in 1933 and then only by a negligible ½ per cent.

These are not the gains of a rising productivity. They have been bought at the price of deep and prolonged un-

(Continued on page 7)

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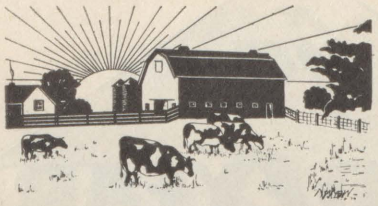


AGRICULTURE

Articles on problems of the farm

Better Hay for Best Returns

by J. N. Bird

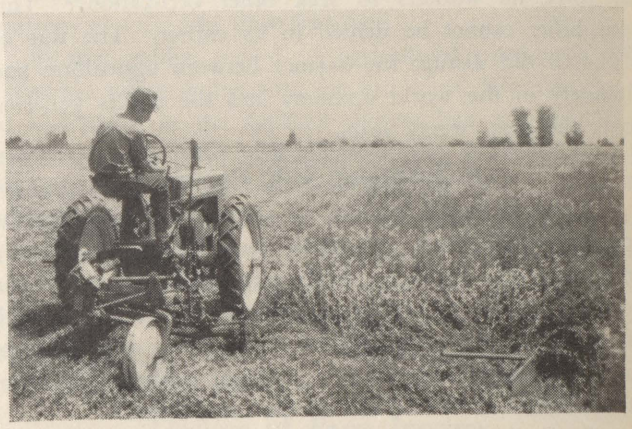
THE returns obtained from dairy farming depend, to quite an extent, upon the quality of the hay that is fed. No other crop varies so greatly in its feeding value nor can be so reduced in value by improper handling. To be successful, the dairy farmer must know how to grow and harvest hay by methods which will produce, year after year, the best possible feed. A high-producing dairy cow has a marvellous capacity to turn hay into a high-quality dairy product but if she is to make the best use of this capacity the hay which she is fed must be of the highest quality.

Quality in hay may be judged from its leafiness and green colour. The best green, leafy hay can only be obtained from timothy or clover cut at an early stage of maturity — not later than early bloom — and by curing it in a way that will result in the least possible loss of leaves and green colour. If hay is allowed to mature beyond this stage before it is cut, many of the leaves will have withered and died and the stems will have become woody and much less digestible. In addition, exposure to rain or even to sun and dew over too long a period will destroy and wash out the most valuable parts of the hay. For these reasons, late-cut hay can only be expected to have about one-half the feeding value of early-cut hay.

It takes the best planning and skill to make high-quality hay under such a variety of weather conditions as prevail each year. However, this cannot be held as an argument against planning. There are a number of important points to be kept in mind in making these plans which are fairly well summed up in the old adage — "Make hay while the sun shines."

Avoid delays

We should be timely with our work. This applies equally to the haying season and the haying day. We should be ready to cut hay when it is ready to cut. This means that other farm operations must take a secondary place for the time being and all the equipment and man power at our disposal must be ready to take the field. Machinery tends to get out of repair and there is probably no worse "bottle-neck" at haying time than machinery which is constantly breaking down. In this connection, a little reflection on our past experiences may indicate the importance of fixing up our haying machinery not the day after we start haying, nor even the day before, but earlier in the year when the rush of farm work is not so pressing.



Clear sunny days are often not too plentiful at haying time and careful planning is necessary to take full advantage of all weather in which hay curing is possible. Haying machinery, especially that used for loading and storing, must be used to save time as well as labour. On the one hand, there should be sufficient manpower to make the most of its use and, on the other hand, it should reduce hand operations to a minimum.

Save the leaves

Special attention should be given to saving as many leaves as possible, especially with clover hays from which the leaves, when dry, shatter so easily. Leaves make up about one-quarter to one-half the bulk of hay as it is cut, but this is not so important as the fact that from 60 to 75 per cent of the total protein contained in hay is in the leaves: they are also the parts which are most digestible and most richly supplied with the mineral, calcium, which is required by stock.

With such protein and mineral value at stake, no dairyman can afford to disregard the loss which this shattering of leaves might bring about. Every care must be taken to handle hay at such a time or in such a manner as to avoid leaf loss. Since the leaves dry so much more quickly than the stems, especially when lying in the swathe, raking should be done when the hay is well wilted but before the leaves become too brittle.

Avoid bleaching and leaching

Allowing hay to lie too long in the swathe may also expose it to undue bleaching by sun and dew. This results in a destruction of the green colouring matter in the hay and greatly reduces its feeding value. To avoid such losses

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Repairing the Mower

by W. Kalbfleisch

A DAY SPENT in reconditioning a mower will probably return more satisfaction in the operation of the machine than any other farm implement. Moreover, the technique of repairing the cutter bar of a mowing machine is applicable to other farm machines, especially the cutting mechanism of binders and combines. Give a mower a chance and it will do a good job in spite of its old age.

Reconditioning the Mower Knife

Every mower knife will need sharpening and some new sections. To remove damaged sections put the knife in a vise in a horizontal position so the jaws of the vise just close to the sections and so the knife strap lies squarely along the top of one of the jaws. With the knife in this position and the damaged section in the centre of the vise, shear off the rivets by using a hammer on the straight side of the section, driving it down. Five sections can be removed from a knife strap in less than five minutes. Care should be taken to hold the knife strap straight along the vise jaw to prevent it from becoming bent.

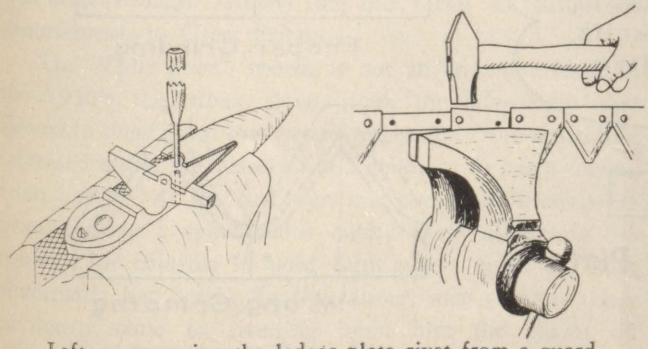
After new sections have been placed on the knife strap, form the rivet heads with the round end of a hammer. Next look along the back of the knife and straighten it up if the knife strap is bent, before you call the job finished.

Every farmer sharpens a knife with a 'V' shaped stone or a file stone, but few give the sections the proper shape. When sharpening the knife, always keep the section as long as possible, so it can cut the proper amount of grass on each stroke.

Overhauling the Cutter Bar of the Mower

Now for the mower cutter bar, where the reconditioning job will reduce the draft of the mower possibly 40 per cent.

Guards:—Guards which are badly worn, warped or very blunt, should be removed and new units placed on the bar. Those guards which are slightly blunted at the points can be sharpened with a file or with a grinding stone. Lips on the guards can be bent with a hammer and they should be given the same shape as new guard lips. There is no advantage in bending the lips down towards the guard ledger plates, since manufacturers have found the best position for the best cutting operation.



Left — removing the ledger plate rivet from a guard.
Right — removing section from a mower knife.

Guard ledger plates:—Ledger plates have small grooves in the side to hold the grass while the sections cut it off. As a result, ledger plates cannot be successfully sharpened and must be replaced when their cutting edge becomes dull.

To remove the plates from the guards, place the body of the guard in a vise, with wings on top of the jaw, and drive the rivet out with a thin punch. These rivets should always be driven out from the top down. The tapered head of the rivet in the plate will shear off and the rivet will readily drive through the body of the guard. When putting in a new guard plate, clean off the bed of the guard and place the plate so the sharp cutting edge is near the top. When putting in a new rivet, put it in from the top, remove the guard from the vise and turn the guard upside down over the head of a half inch bolt. The bolt, held in a vise, will hold the rivet head firmly against the plate while the rivet is rounded with a ball head hammer. Most people cut the rivet too long before forming the head. An eighth of an inch of rivet is all that is required for a head.

Aligning the guards:—This is the most important job in reconditioning a mower and can be done at no cash cost. After the guards have been firmly bolted to the cutter bar, pick up the end of the cutter bar and look down the bar along the guard plates. Pick out the guards that are high and bend them down into line with the other guards. If some new guards have been placed on the bar, use these as a guide to the correct position of the guards. To bend the guards down, let the bar down onto a heavy iron rod (a crow-bar for example). Place the support below the guard, and across it just in front of the bolt. After properly tightening the bolt, use a heavy hammer on the point of the guard to bend it down. Apply the hammer about one inch from the end of the guard, without fear of breaking it. In straightening guards I have never known one to break. Alignment of the guards is absolutely necessary for the proper operation of a mower.

Setting the wear plates:—Now place the knife in the cutter bar and take the back-and-forth play out of the knife strap by setting up the wear plate. This plate is about 4½ inches long and fastened to the cutter bar directly below the knife clip. To set up the wear plate, slacken the two guard bolts holding the plate, and with a blunt chisel drive the plate ahead until it takes the slack out of the knife but still allows the knife to run freely. In this operation you should start with the plate near the outer end of the cutter bar. If you are in the habit of using an old knife and a new knife in the mower, make all adjustments when the newer knife is in the mower because close adjustments with an old worn knife would not give enough room for a new one.

(Continued on next page)

REPAIRING THE MOWER

(Continued from page 5)

At the inner end of the cutter bar, below the yoke, there are two guide plates for the knife head. If badly worn, they cause the knife to pound and sometimes the knife will break due to the binding. When worn badly they must be replaced but very often they can be taken off, shims removed and replaced so they will guide the knife properly.

Setting the knife clips:—Knife clips are made of malleable iron or steel and can be adjusted with a hammer. To allow enough clearance for the free operation of the knife, place a post card between the knife sickle and the clip, and then hammer the clip down until it touches the post card.

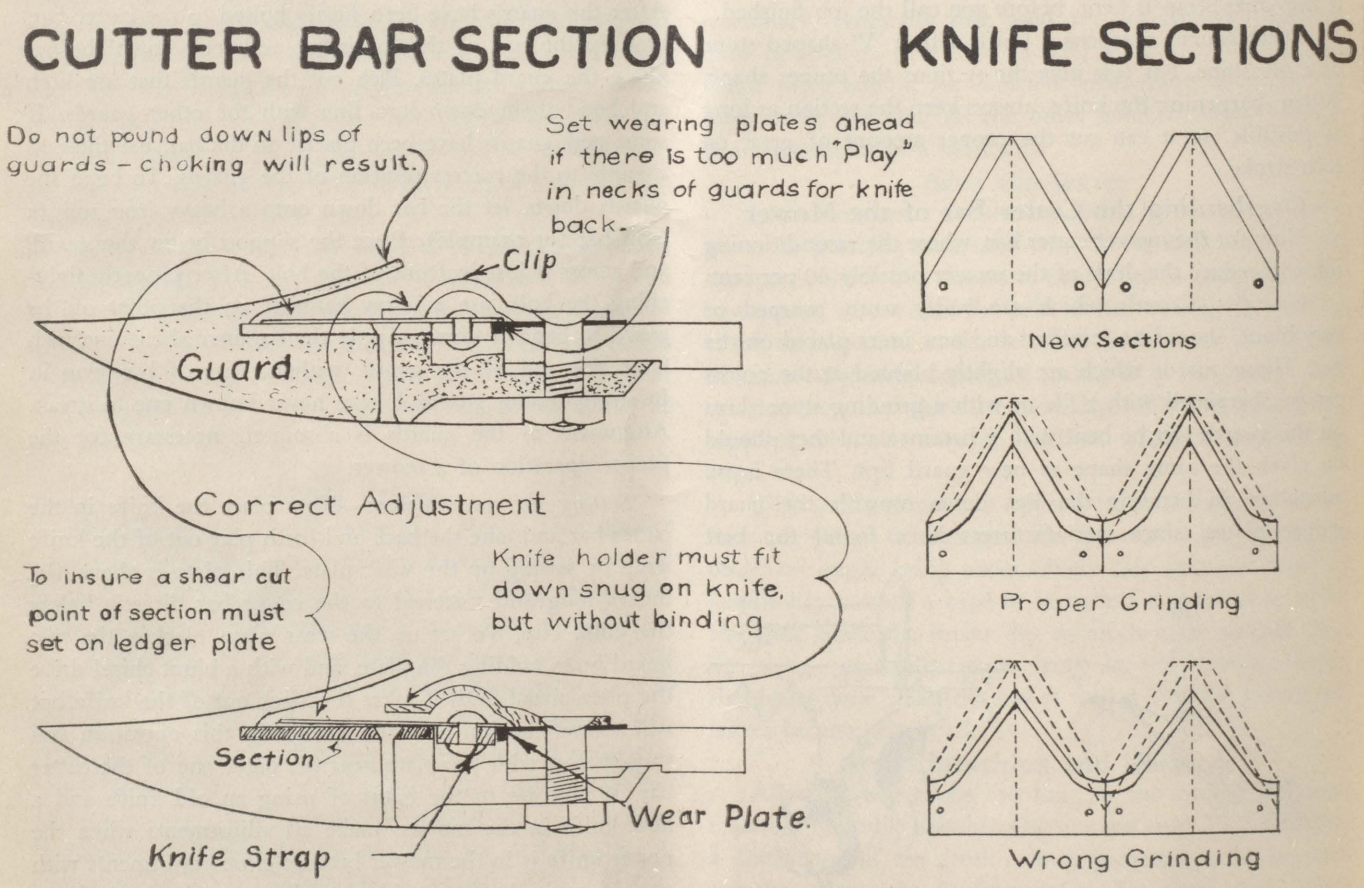
Proper Operation of the Knife and Pitman

Many a mower cuts poorly because its owner has put in it a pitman of the wrong length. When a mower knife operates, the sections of the knife move from one guard to the next, the points of the sections stopping directly on top of the guard plate at the end of each stroke. If a broken pitman has been replaced by a new pitman of the wrong length, the knife sections will take part cuts across the guards and operate very poorly.

On the main frame of the mower the pitman boxing is about the first part of a mower to wear out. The bearing can be easily replaced if worn and the hammering of the pitman removed. In many cases, however, the crank pin as well as the pitman bearing is worn and the pin must be removed. The removal of the pin has some "tricks" and the pin and crank wheel should be carefully inspected before attempting the job. If the pin is screwed into the wheel, use a pipe wrench on the pin, turning the pin around in a direction opposite to the rotation of the crank wheel rotation. If the pin has been put through the wheel and riveted on the back, break the pin off with a hammer and drive the stub out of the wheel. If the pin is fastened with a nut and cotter key this can easily be removed and the crank pin driven out of the wheel.

Oiling the Mower

When a mower is used on sandy land it is usually best not to lubricate the knife on the mower, but under average conditions the knife head and knife should be lubricated with machine oil at least every two hours of operation. Although different bearings require more or less oil according to their duty on a mower, over oiling has never harmed any mower and only too often the bearings such as the pitman are badly neglected.



WAR ECONOMY

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employment of an important segment of the working population and the distress of the whole rural community. The farmer has been compelled to sell his products at prices which have denied him an income comparable to that of other classes in the community.

One of the first things necessary is a change in the attitude of the city population. The protests of hurt surprise that broke out in the newspapers in all the larger cities when the price of butter began to rise last December was proof, if proof were needed, that the urban population had grown fully used to food prices which meant distress to the farm population, and felt that such prices should be maintained to preserve them against disturbance of established habits and expectations. But a larger production of meats and dairy products is one of Canada's contributions to the war effort. We stand committed to Great Britain to increase our production especially of cheese and bacon. In time of war Canadian production is doubly valuable to Great Britain because it involves the shortest sea-haul. This is one thing on which we must not fall down, and we stand in danger of that very thing unless we allow higher returns to the farm population.

Will Aid War Effort

Nor is there any reason to be afraid that such a correction will complicate the post-war problem. In the wheat-growing regions the problem of contraction may have to be faced; but in meat and dairy products the problem is how to give such present returns to labor as will permit full production from a farm capital already in place. There is no necessity of encouraging any additional investment. It cannot be done by raising our export prices. Britain, which is our major outlet now, would face a real difficulty in financing the cost and might be compelled to buy elsewhere if we attempted to raise prices to anything close to the level necessary to produce a "parity" agricultural income. We are then driven back to the idea of a "split price" system in which we shall hold down our export prices, while raising the controllable domestic price and attempt to distribute the gains of such a policy to all producers in proportion to their production. Only so can we keep enough farmers on the farms to fulfil our commitments to Great Britain.

The "Split price" system is not an attractive idea. In the 1930's the urban classes took the advantages that flowed to them from low export prices and from drastically increased tariffs on manufactured goods as so much manna from heaven. At the first sign that these conditions were passing away a spontaneous outcry arose all across the country for controls to hold farm prices down to these abnormally low levels. To the farmer, such controls come perilously close to rivetting upon him the chains of

(Concluded on page 9)

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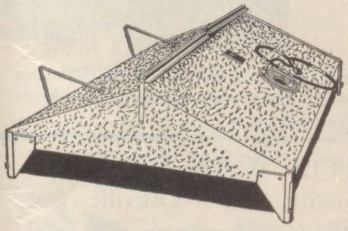

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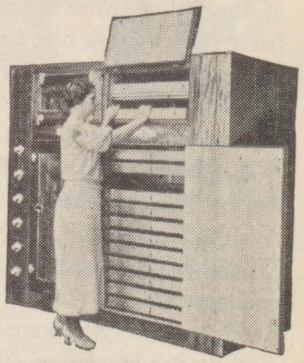

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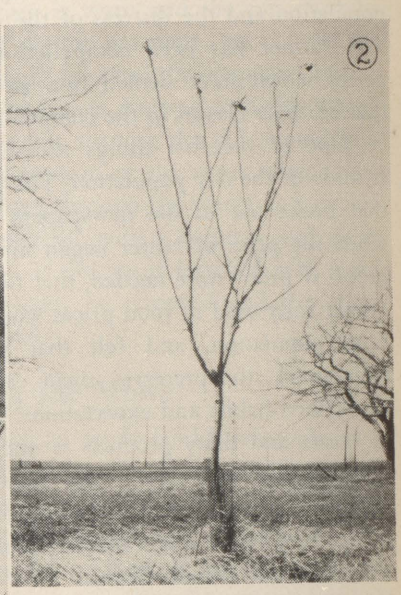
FRAMEWORK-GRAFTING AT MACDONALD COLLEGE

AS DESCRIBED IN THE MARCH ISSUE OF THE JOURNAL

1. 4-year old Hibernal tree frame worked to Lawfam June, 1940. Note bridge grafts at trunk, where tree was girdled by mice in 1939.

3. 660 McIntosh scions were inserted in this 30-year old Patten Greening tree on June 20, 1940. There are many fruit buds showing for this year.

4. Close up of McIntosh scions grafted on a seedling tree in April, 1940. Note the vigorous growth.



2. 2-year old Hibernal grafted to Platt's Red Melba June, 1940. Trees should be at least 3 years old before being frameworked to make best use of the hardy Hibernal frame.

CALVES SOLD FOR WAR RELIEF

During the National Ayreshire sale at Oakville, Ont., on May 31st, ten Ayreshire heifer calves were sold in aid of the British War Relief Fund. All these heifers were from the choicest bloodlines of the Ayreshire breed, by leading herd sires out of good record dams. The entire proceeds, without deducting any sale or other costs, will be sent to the British War Relief Fund.

All these calves were donated for this purpose by their owners. Quebec breeders who gave calves were Hon. Adelard Godbout, R. R. Ness & Sons, G. H. Montgomery, W. W. Skinner and the Provincial Dairy School. Ontario donors were F. C. Biggs, W. D. Black, G. C. Leitch, E. L. Ruddy and H. A. Swart.

A similar but larger sale was organized by the Holstein breeders, who held a War Effort Calf Auction on May 27th, the day before their National Sale, at Brampton, Ont.

EDITORIAL

(Concluded)

and the necessity of studying their own situation, and their appreciation of the need for organization to make their influence felt, must be gratifying to all who have the interests of the farming community at heart.

A more detailed account of the Conference and the Rally will be given in our next issue.

ANOTHER BIG ORDER OF EGGS FOR BRITAIN

An additional order of 5,400,000 dozen eggs has been received by the Special Products Board from the British Ministry of Food. These eggs are to be delivered in the fall, so they will be bought without delay and put into storage. The price to be paid is the same as for the previous order, placed earlier in May, namely, 33/ per case of 30 dozen, f.o.b. Canadian seaboard, the British Ministry absorbing the cost of storage.

CROP AREAS FOR 1941

According to the latest estimates available of acreages to be sown this year in Quebec, 30,100 acres of wheat, 1,697,500 of oats, 161,100 of barley, 5,900 of rye, 169,800 of mixed grain, and 146,800 of potatoes will be planted. Twice as much flax will be planted; over 26,400 acres will be devoted to this crop.

Graham bread was named for Sylvester Graham, a Connecticut gentleman who lectured on temperance.

WAR ECONOMY

(Continued from page 7)

permanent subjection to an inferior position. In simple justice he may and does ask that if he is to lose so heavily as he did by the changes of the '30's why should he not be permitted to make a limited and partial recovery when those unfavorable conditions begin to pass away? The attempt to deny him that relief has generated a burning resentment which can become dangerous if it is not understood and its causes remedied. It is going to require all the tolerance and all the capacity to adjust rapidly to new conditions of which this country is capable if it is to pull its full weight in the war or to meet the problems of the peace. Agricultural prices are now moving into the foreground as one of the early tests of these capacities. In this and other fields, the next year or two will show how much flexibility there is in the Canadian social structure; and flexibility is life.

BETTER HAY

(Continued from page 4)

speed in drying is essential. Experiments have shown that hay dries most rapidly to a moisture content at which it is fit for storing when it is allowed to become well-wilted in the swathe and then rolled into light windrows for further curing. For this latter operation the side-delivery rake is an ideal implement because it tends to roll the leafy, upper part of the plants toward the centre of the windrow where they are protected to some extent from sun and dew, and it leaves the coarser butts of the stems on the outside where they dry much more quickly than they would if left in the swathe.

A good haymaker "keeps an eye on the weather" and aims to have as little dry hay as possible in the field when showers threaten. But there are times when all signs fail and the worst comes to the worst. As a rule, it is a good plan to maintain a suitable balance between the rate of mowing and the rate of storing in order that too much will not be cut at any one time and therefore subject to damage in "catchy" weather.

Under poor curing conditions it may be necessary to adopt other methods of handling the hay crop. These will involve more labour and will increase the cost so that it will be necessary to weigh the higher cost of the hay against the value of the product obtained. One of these alternatives is the old practice of cocking hay. Another is the practice of curing hay on tripods or frames which hold the hay off the ground and remove the danger of moulding in the bottom. The advantages of this latter method are set forth in a recent bulletin from the Ontario Agricultural College (Ont. Dept. of Agriculture Bul. 411, 1940). Still another alternative which is coming into use, especially with early cut red clover and alfalfa, is the ensiling of the crop with the aid of molasses or some other preservative. A discussion of this practice appeared in the last number of this Journal.

Whatever method is used, it must make the best of such weather conditions as usually prevail at haying time.

Miracle Bill

IS COMPLIMENTED ON THE GROWTH OF HIS CALVES

"We had neighbours to dinner on Sunday. Real nice folks, and Tom's a good judge of cattle.
"Strolling around the buildings after dinner we ran into the hired man bringing in some of the stock. 'Why', said Tom, 'I didn't know you had so many yearlings, Bill!'
"Well, I got quite a kick out of that remark because not one of those calves was over seven months. But, just as Tom said, they looked like yearlings.
"It's MIRACLE CALF MEAL that does the trick, I give it to all my calves, not only because it makes them grow faster but also because it is cheaper than feeding them milk. By selling the milk I used to feed to the calves I find my profit at the end of the month larger by a good many dollars.
"Sure, Tom's feeding his calves MIRACLE CALF MEAL now."

"MIRACLE"

CALF MEAL

Write for practical booklet on profitable livestock feeding — it's free.

FEEDS DIVISION
The
OGILVIE FLOUR MILLS CO., LIMITED
Montreal, Que.

IF IT'S "OGILVIE" — IT'S GOOD!

Maintain Economic Production

by **W. A. Maw**

MORE and more under present world conditions the need for economy in all practices is being emphasized. In poultry management during the summer months the maintenance of egg production is one problem, quick healthy growth in the young stock is another, and due consideration of the orderly marketing of the meat stock is still another problem. Poultry production is looked upon as being largely seasonal in nature, but the aim should be to take advantage of all possibilities in production and marketing in order to create savings in feed, labour and stock, and to sell products continually rather than at any particular time.

Summer egg production

Summer egg production can only be maintained at a high level by careful management. House the birds in clean airy conditions, avoid mite infestations, treat the birds for body lice, break up broodiness and feed for maximum production. Where possible the houses should be well ventilated to provide cool night conditions; outdoor shade should be provided close to the laying house; if not by trees and shrubs, by planting sunflowers or corn. All houses should be thoroughly cleaned at this season by washing and final disinfection or white washing. Waste crank-case oil can be applied to the roosts to avoid mite infestations and all nests should be thoroughly disinfected. Treat the birds for body lice by dusting with lice powder or by treating the roosts with nicotine sulphate. Nicotine sulphate is put on the surface of the roost just before the birds go to roost in the evening. Only a small strip on the surface is necessary. The fumes of the nicotine will kill lice and mites on the birds while they are on the roosts.

Broodiness naturally develops during the hot weather. Arrange for an open-slatted coop in which to place all broody individuals, as soon as found on the nest at night, and keep them cooped up until they cease clucking. Feed broody hens with a moist laying mash to bring them back into production as soon as possible.

The layers should be encouraged to eat more mash than grain. Open hoppers of mash should be provided as usual and a moist mash should be fed at noon. If good range forage is also at hand, the birds should keep in good health and maintain high daily production of eggs. Be sure to provide, at all times, an ample supply of clean fresh water. Collect the eggs twice daily and cool them immediately to maintain their quality.

Grow healthy chicks

It is never too late to emphasize the need for general sanitation in all operations in order to maintain health and promote good growth and ultimately economic production. The "Grow Healthy Chicks" programs, which have been used for the past fifteen years, have resulted in great savings to the poultry keeper.

The importance of clean chicks and clean land is shown to be fundamental in avoiding heavy losses through disease infestation resulting from diseased chicks and unsanitary ground for range.

Orderly marketing of meat stock

The demand for poultry meat is continuous throughout the year. As soon as the new crop of chickens is started, the demand for broilers and small roasters develops. Early stock, which is well-grown and well-finished, is in good demand. In order to take advantage of such demand and also to avoid a break in the price level due to heavy supplies being marketed at any one particular time, attention should be given to the need for continual marketing of young stock throughout the growing season. Such male stock as Leghorns should be marketed as broilers at from eight to twelve weeks in age, whereas the heavy males, such as the Rocks, Reds, Wyandottes and others, are more profitably carried to medium and large roasters. However, a portion of the medium-sized roasters should be marketed throughout the summer season.

All meat stock can be profitably fed in confinement for two weeks before being marketed. Confinement in pens or crates is most satisfactory. Feed a mixed cereal ration supplemented with milk, if possible, giving three feeds daily of a wet mash, thin enough in consistency to pour freely from a pail.

Continual attention to the matters referred to is essential to economic management. The creation of savings in feed and labour, as well as taking advantage of early season prices, is the first form of profit.

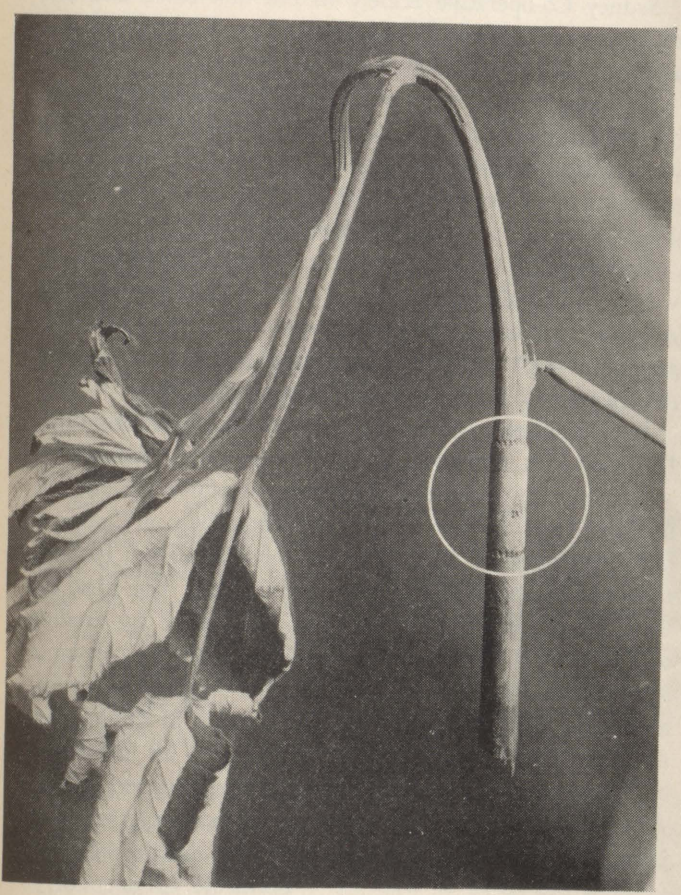
For success the following eight points are essential:—

1. Clean chicks — start with pullorum disease-free (bacillary white diarrhea-free) chicks or eggs.
2. Clean incubator and eggs — scrape, scrub, disinfect. Use only clean eggs.
3. Clean brooder houses — scrape clean, scrub with water and lye or disinfectant. (Bichloride of Mercury, tablet form, 1 oz. to 8 gal. water) Spray with disinfectant; then with whitewash.
4. Clean ground — Use only ground that has been entirely free from chickens or chicken manure for at least one year.
5. Clean litter — Use shavings. Clean and renew after first 10 days; then every 5 days thereafter.
6. Clean feed in hoppers — Feed only in hoppers that cannot waste or allow feed to become soiled.
7. Clean management — Avoid travelling from the hens' quarters onto the chick range. Use disinfectants. Keep visitors out!
8. Clean laying houses — scrape clean. Scrub with water and lye or disinfectant. Spray with good disinfectant; then with whitewash.

A Common Trouble in Raspberry Plantations

Do the tips of some of your raspberry canes wilt and die during July? It is a common complaint in this Province and elsewhere. The injury is caused by the raspberry cane borer, a slender, semi-cylindrical, black beetle with a yellow "neck".

The egg-laying habits of the female beetle are responsible for the condition referred to; she makes two ring-like girdles about one half-inch apart and a few inches below the tips of the new canes. Between the girdles an egg is deposited in the cane. On hatching, the grub bores downward through the pith for a short distance and spends the winter there. The following season it burrows to the base



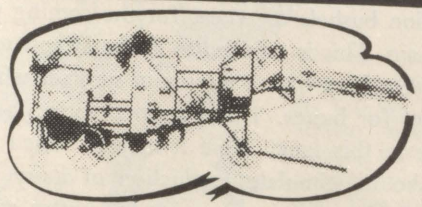
of the cane which dies, and since it is the second year raspberry canes that produce fruit, the crop is affected.

To control, go over the raspberry patch once a week and cut off all affected tips a few inches below the injury. If allowed to remain, the wilted tips will eventually break off, leaving the borer in the cane and making the injury more difficult to detect.

Around farm lots and in pastures small trees need protection to obtain a start. A simple contrivance can be arranged by setting three posts and boarding around the sides so that the tree is protected and will keep livestock from taking the leaves from the young trees. Wire around the top will help prevent trouble.

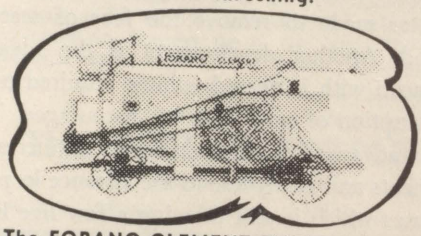
FORANO Threshers

HAVE HELD THE LEAD FOR 25 YEARS



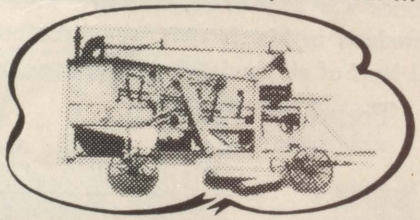
FORANO ALL-STEEL

The FORANO ALL-STEEL THRESHER with its frame electrically-welded affords absolute solidity and great resistance. The well-known Alemite Zerk grease cups are in use throughout and grease gun supplied with each machine. The best machine for clover threshing.



FORANO CLEMENT

The FORANO-CLEMENT THRESHER is a new-type machine, recently patented and invented by a man of widespread experience in grain threshing, who devised an entirely novel arrangement. If you are not familiar with this Thresher, you would do well to enquire about it.



FORANO QUEBEC

The FORANO-QUEBEC THRESHER is a universally-known machine long appreciated for its simplicity, performance and low price; characterized by a patented screen made in two inversely operating parts—the only machine of its kind.

FORANO CHAMPION

The FORANO-CHAMPION THRESHER is especially suited for the personal use of the farmer. This improved old timer is still second to none for small capacity requirements.

FREE CATALOGUE ON REQUEST

THE PLESSISVILLE FOUNDRY

PLESSISVILLE, P.Q., CANADA

MAKERS OF FORANO PRODUCTS SINCE 1873

CO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

MARKET COMMENTS

The past month has recorded many events of great interest to the market for Canadian farm products. The sale of 120 million bushels of wheat for the coming year was made to Britain. This is referred to as the largest grain deal of all time. On May 14th a minimum summer wholesale price was set for butter. This minimum price is discussed elsewhere in this issue. Here it may be stated that this minimum should stimulate production of dairy products generally. With a minimum price for butter and a bonus on cheese the dairy business should be stabilized, and — the season permitting — the amount of cheese and manufactured milk products required overseas provided, with enough butter made to remove the fear of scarcity recently developed. Another development is the advance in the price of bacon with increased volume required overseas. Home consumption of pork is to be discouraged. The price of hogs has advanced partly as a result of increased overseas requirements and partly due to the advance in price in the United States which is still drawing a few live hogs across the line.

The index number of Canadian farm products in March was 69.1 compared with 71.3 in March 1940. The index number of all goods was 85.9 in March 1941. Prices of Canadian farm products in March 1941 were 16.8 points below the general level of all goods.

Trend of Prices

	May 1940	*April* 1941	*May* 1941
	$	$	$
LIVE STOCK:			
Steers, good, per cwt.	7.71	9.25	9.00
Cows, good, per cwt.	5.72	6.60	6.80
Cows, common, per cwt.	4.16	4.70	5.20
Canners and Cutters, per cwt.	3.04	3.90	4.10
Veal, good and choice, per cwt.	7.75	8.45	9.00
Veal, common, per cwt.	6.01	6.75	6.85
Lambs, good, per cwt.	9.00	10.20	8.00
Lambs, common, per cwt.			
Bacon hogs, dressed, B. 1, per cwt.	11.30	11.70	12.25
ANIMAL PRODUCTS:			
Butter, per pound	0.23¼	0.31½	0.30
Eggs, Grade A, large, per doz.	0.23½		0.22
Chickens, live, 5 lb. plus per lb.	0.17	0.20	0.19½
Chickens, dressed, milk fed, Grade A, per pound	0.22½	0.28	0.29
FRUITS AND VEGETABLES:			
Apples, B.C. MacIntosh, extra fancy, per box		1.80	2.00
Potatoes, No. 1, Quebec, per 75 lb. bag	1.10	0.55	0.55
FEED:			
Bran, per ton	26.00	26.00	24.50
Oil meal, per ton	(33%) 32.00	(32%) 33.00	(32%) 33.00

WHAT ARE CO-OPS WORTH TO MEMBERS?

What savings are co-ops making for their members? There are some interesting figures. For those who do not count the spiritual fellowship of the societies as of any value some of them may be rather convincing.

The co-operative store at St. Andrew's N.S., has in the last five years turned back $22,000 to its members.

Sydney Co-operative Society in the first three and one half years of its life returned to members $42,000 and put aside reserves of $15,000.

Co-operative marketing of canned lobster alone has saved the fishermen of Nova Scotia at least $15,000 a year since its inception. This is the very conservative estimate of the inspector of co-operatives.

Other Records

If we look to the co-ops of other areas we see impressive volumes of wealth being sluiced back to the rank and file. A report published in the Consumer of Regina says that savings of $1,379,637 had been made for the members of the 41 general stores in Saskatchewan by 1938.

Last November Jerry Voorhis of California told the U.S. Congress, according to the Congressional Record:

"This year, organized consumers in Ohio taught the fertilizer trust another lesson. The Farm Bureau Co-operative Association of Ohio invested about $250,000 in three fertilizer compounding plants. Immediately, the trust cut the price of fertilizer by $4 a ton. That price cut applied only to Ohio. It was made, obviously, to crush the consumer co-operative. But the consumers met the competition, unfair as it was. The net result was the farmers in Ohio saved this year $700,000 in fertilizer cost and on an investment by the co-operative of only $250,000 in permanent plants. And the benefits of this action went to every farmer in Ohio. But it was the co-op members who did the job.

Maritime Co-operator.

CO-OPS MUST SUCCEED

"For whatever may be the idealistic aspirations, or the public-spirited motives of the founders and directors of a co-operative society, it is idle to pretend that any such society can secure year in and year out, the adhesion and support of thousands of average citizens, uninspired and apathetic, unless it becomes to them a source of immediate and tangible benefit. What brings in recruits to the co-operative society and holds their loyalty to the movement is the discovery that, in addition to the pleasure of comradeship on equal terms in a joint enterprise, they each and all, owing to their membership, and without depriving any person of his dues, actually become individually richer."

Beatrice Webb.

FACTORS LIKELY TO INFLUENCE WOOL VALUES IN 1941

1. Wool consumption on this continent in 1940 reached a high point for the past several years. It continued to run high with mills at capacity production in an endeavour to care for both military and civilian requirements.

2. Steady and more widespread employment is stepping up civilian demand for woollen goods.

3. The availability of outside wool to Canada and United States is dependent upon shipping facilities from Southern Hemisphere exporting countries.

4. Intensification of naval warfare may have an effect on the movement of Australian wool.

5. The carry-over of Domestic wool in the U.S. is the smallest in recent years and our entire Canadian clip of 1940 has gone into consumption.

Possible restraints are:

1. The possibility of the war terminating this year — rather remote at this juncture.

2. The use of substitutes is gaining. Spun rayon used in the woollen and worsted industries will probably be the largest on record.

3. Since last May, shipments to continental European countries have been largely cut off by the British blockade and the United States, Great Britain and Japan are now the only important markets for wool exports from the Southern Hemisphere.

Sales of cattle in the first four months of 1941 at Canadian yards and plants continue to total slightly higher than during the corresponding period of 1940. It is likely that this trend will continue throughout 1941, states the Current Review on Agricultural Conditions. Sales of calves, however, have been somewhat below those of the preceding year, an indication that breeders are tending to hold back more young cattle to build up herds.

STUDENTS RUN A CO-OP HOUSE

The largest private rooming house on the University of Minnesota campus is co-operatively-owned by the students. The house serves meals to students at $4.50 per week on the co-op plan, while board and room cost $84 a quarter. Capital is raised by requiring each student who lives at the house to purchase one share of non-interest bearing stock at $2.50 during each quarter he lives in the house. The common stock is converted to 5% preferred stock when the student completes his education, and is redeemed three to five years after he leaves the university.

Approximately half of the farmers of Canada belong to some kind of co-operative association. The Economics Division of the Dominion Department of Agriculture places the membership figure at 396,000. Half of these are connected with marketing associations, the other half are members of co-operative purchasing associations.

Sask. Co-op. Consumer.

The barn is, by far, the most important building on any farm. Its loss by fire, or storm, is a serious setback. Sheet metal Roofing and Siding is the logical material to protect your building. You get QUALITY when you buy

PEDLAR'S NU-ROOF

made in the famous "Council Standard" brand . . . Good for a lifetime . . . sold with a 25 year Guarantee. Sheets have a covering width of 33", are provided with special nailing spots and come in lengths up to 10 feet. Make your dream of a *protected* barn come true. Invest in durable Nu-Roof now.

Send dimensions of your building for Free quotation on complete roofing job.

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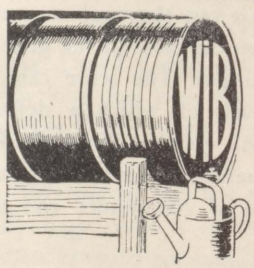

MORE CROPS —LESS WORK

with WIB

PURE CANE MOLASSES

GREEN GRASS SILAGE

● Easy to handle — you can even cut in the rain — palatable and nourishing, green grass silage made with WIB Pure Cane Molasses steps up farm profits with safety.

Write for Professor Crampton's Booklet on Silage.

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5400Y Notre Dame Street East - Montreal

DEPARTMENT OF AGRICULTURE

Activities, Plans and Policies of the Quebec Department of Agriculture

Agricultural Merit Competition for 1941

This year's "Merit Agricole" competition will be held in District No. 2, which includes the counties of Brome, Bagot, Chambly, Compton, Drummond, Iberville, Missisquoi, Richelieu, Rouville, Shefford, Sherbrooke, Stanstead, St. Hyacinthe, St. John, Vercheres and Yamaska. As in other years, three classes of entrants are provided for: professional farmers, operators of demonstration farms and "amateur" farmers or those who make farming a hobby rather than a profession.

In past competitions District No. 2 has always brought out a large number of contestants. In 1936, the last time the competition was held in these counties, 172 entries were made, and 162 of the farms were visited by the judges; that year 22 gold medals, 94 silver medals and 46 bronze medals were awarded. At the time this is being written not all entries for the 1941 competition have been received, but it seems evident that this year's contest will be fought out between a large number of the progressive farmers in this district.

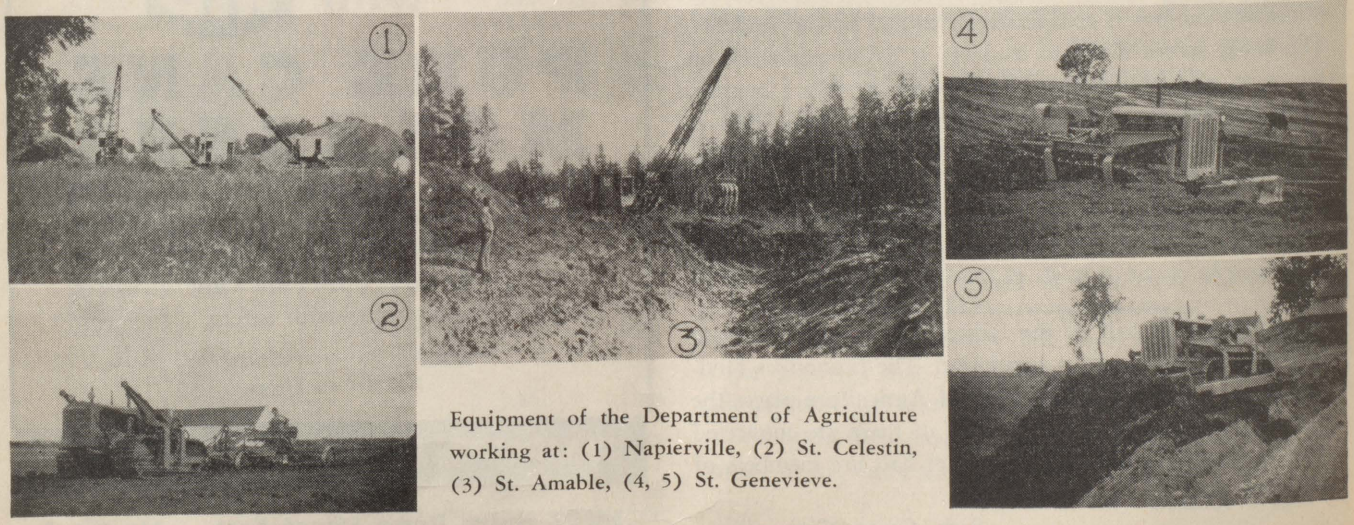
The system of judging used is a very thorough one, and the farms are not graded merely on the basis of the general impression they make on the judges. The score card is divided into 12 sections, for each of which a definite number of points are allowed, and each section is further subdivided. For example, the general management practice of the farm is scored on a value of 200 points, and this is judged as follows:—

	Points
Division of fields	16
Cleanliness — freedom from weeds	24
Condition of fences and gates	24
Drainage	36
Quality of cultivation	32
Fertilizer practices	36
Handling of livestock in the pasture	16
Roads	8
Shade and shelter for livestock	8
	200

The whole farm is judged on the basis of a total of 1000 points, as follows:—

	Points
Type of farming and suitability of the situation	100
House and out-buildings	25
Farm buildings	90
Machinery	50
Livestock	150
Cropping plan	40
Farm and soil management	200
Permanent Improvements	35
Field Crops	200
Special production — pure seed, bees, etc.	55
Handicrafts	25
Farm accounting system	30
	1000

Judging is done in July and August by a committee of experts, and awards are made each autumn.



Equipment of the Department of Agriculture working at: (1) Napierville, (2) St. Celestin, (3) St. Amable, (4, 5) St. Genevieve.

THE AGRICULTURAL MECHANICS DEPARTMENT

Mr. P. E. Roy, B.S.A. has been appointed to the staff of the newly created division of Agricultural Mechanics, a part of the Agricultural Engineering Service. This division has to do with mechanical equipment of all sorts as used on the farm. Its technicians will advise farmers as to the best equipment to buy for their particular needs, and will give suggestions as to its most efficient operation and maintenance. The use of machinery is certainly one way to reduce costs and improve efficiency, but machinery must be suited to the work it has to do. It is false economy to buy a machine which is capable of handling twice as much work as its owner has available, when a smaller and less expensive machine would serve the purpose just as well. This is one field where the advice of experts in the use of farm machinery should be sought. The new division will also be prepared to furnish plans and suggestions for remodelling machinery, or for improvising new machines from old parts. Often very little work is needed to transform an old discarded piece of machinery into something useful. All that may be needed is the idea, and this the new department is ready to furnish.

Mr. Roy obtained his B.S.A. degree at Oka, and for the past two years has been a student in the Agricultural Engineering Department at Macdonald College.

FAIR DATES

It is not yet possible to announce the dates of all the fairs which will be held in Quebec this year, but the dates of some of the larger ones are known. The Lachute Fair was held on June 12th, 13th and 14th; the Sherbrooke Fair will be from the 23rd to the 30th of August; the Quebec Fair from August 29th to September 5th; the Sherbrooke Winter Fair is set for October 15th, 16th and 17th.

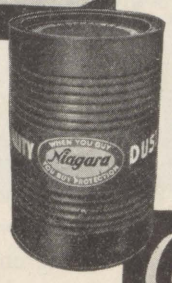
There will be 52 county fairs this year, organized by the agricultural societies.

MR. MAHEUX HONOURED

Mr. George Maheux has been elected vice-president of the Canadian Conservation Association, of which John D. Detwiler of Western University is President. The Association studies the many and varied problems concerned with the conservation of Canada's natural resources — soil, fish, game, forests, and minerals and is also interested in the problem of the civil rehabilitation of Canadian soldiers. Other members of the Association include university professors, executives of lumber and pulp and paper companies and officials of the Federal and Provincial Governments across Canada.

Niagara Copotex

When these dusts are thoroughly applied, they spread a complete unbroken film of protection over the leaves. This is a Niagara Brand manufacturing feature.



Copodust is the highest quality copper-lime dust. Copotex is Copodust with Niagara Calcium Arsenate added. Copodust controls fungus diseases on potatoes, celery and other field crops. Copotex is disease and pest control for field crops.

Niagara Copodust

TWO TOP-NOTCHERS —

Diseases—late blight and early blight, and insect pests —potato beetles, flea beetles and leaf hoppers—just can't touch growth that carries a coat of these dusts. Because of their high qualities there is full protection until new growth demands another dusting. Spend less time in the field by spending your money wisely for crop protection. Buy Niagara Brand.

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La Coopérative Fédérée de Québec.

NIAGARA BRAND SPRAY CO. LIMITED
Burlington, Ontario

A REORGANIZATION IN THE DIVISION OF AGRICULTURAL ENGINEERING

Mr. David Clerk, chief of the Agricultural Engineering Service, has been named to head the new Provincial Drainage Office which was set up recently. The new organization was created to deal as an intermediary between the Government and the municipalities which are affected by drainage projects of the Government. It will see that needless lawsuits are avoided, at the same time making sure that a project of value to the majority will not be blocked by stubborness on the part of a small minority. It will determine what drainage work is necessary in each locality, will work out the assessments of costs and responsibilities, and in a word do all in its power to help the work of the Department of Agriculture officials insofar as drainage work is concerned.

Paint tins and drums make handy containers about the farm when cleaned inside. To do this easily and thoroughly, first remove all the paint that can be scraped out of them. Then set them in a tub of water with a weight in each to keep them down, and drop a lighted newspaper inside of each. The paint residue will ignite and burn away without melting the solder joints as the surrounding water protects them against excessive heat.

DEPARTMENT CO-OPERATES IN THE MACDONALD COLLEGE PASTURE PROJECT

Just ten years ago this spring a committee was set up at Macdonald College to investigate pasture problems. It was realized full well, at the time, that this was no simple undertaking and subsequent experience has amply confirmed this view. Soil, climate, fertility, the natural herbage, management, the grazing animal, and other things are all intricately interwoven in the final outcome of a pasture. The committee chosen was therefore one representing those departments chiefly concerned with one or more of the various aspects of pastures, viz: agronomy, animal nutrition, botany and chemistry. Over the ten year period the personnel of the committee has changed somewhat but the representation remains the same. The work undertaken by this group is known as the Macdonald College Pasture Project.

Generous support from the Quebec Department of Agriculture as well as from the College has permitted the work to proceed with out undue handicap. Funds have been available to employ graduate assistants to carry out much of the detail of the various experiments undertaken.

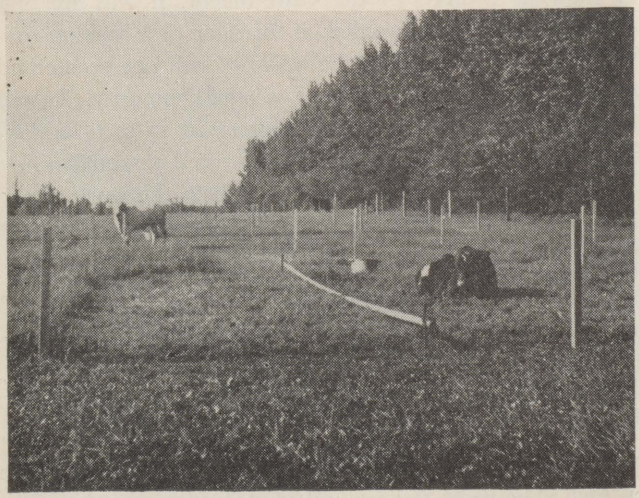
This project is in no sense of the word an isolated unit. Close collaboration is maintained with the federal and provincial workers. A federal-provincial group meets periodically in rotation at some point in Ontario or Quebec to discuss the larger issues. An annual meeting is held of the provincial men at which time recommendations are drafted for pasture treatments during the ensuing year. These are published in a booklet entitled "Recommendations of the Provincial Pasture Committee" (for the current year). This booklet contains the most complete advice available for Quebec conditions. It is obtainable at no cost through any of the recognized agricultural offices in the province.

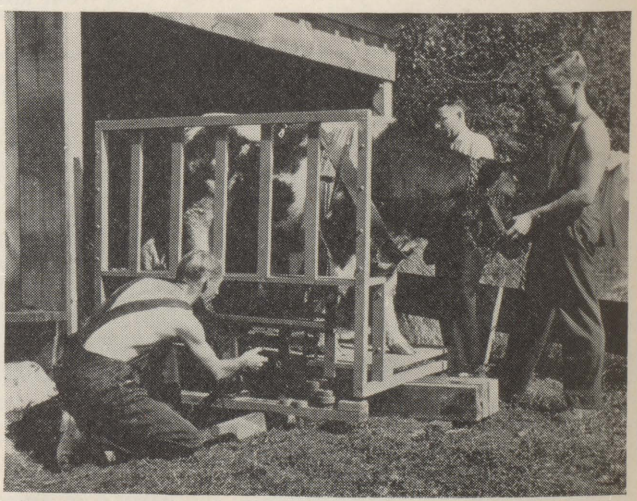
Results:

Much of the work in this project has attempted to get behind the scenes, as it were, and to learn why and how certain things happen, but at the same time attention has been given to findings of immediate practical value. The annual booklet referred to contains all of the immediately useful information gleaned from the work of this project, plus that of other provincial workers. In addition, however, there have been numerous articles for the farm press and over twenty publications of a more scientific nature have gone out in bulletin form or in various journals.

Space will only permit a very brief resume of some of the more important results which have a direct practical application. Examination of a large number of pastures, over a wide area of the province reveals generally a low grade sward. The cover is thin and weeds are very prevalent. In one county surveyed closely, not over 10% of the pastures had anything like a good sward.

Fertilizer trials, either with plots or on a field scale have confirmed the general observation that the fertility level is becoming very low and that steps must soon be taken to restore the depleted plant food or the pastures will steadily become worse. Summing up all the evidence from the numerous trials conducted, it appears that with a suitable application of fertilizers, the average rundown pasture will increase its production anywhere from 50 — 100% in gross amount. The gross increase does not, however, represent the true situation because the quality of the new herbage is much better due in large part to the response of the wild white clover commonly found widely distributed in our pastures. This valuable legume is largely non-productive where the fertility level is low.





Steers wearing special harness and collection sacs graze the experimental pasture areas. By a record of the feces produced it is possible to determine the quantities of herbage eaten and hence to relate amounts eaten to gains in live weight. Steers are weighed about once in 10 days.

The importance of good pasture management is not at all well appreciated in this country. The full benefit of fertilization cannot be realized unless the grazing is adequate and applied at the right time. Owing to the character of our climate, most of the pasture species make a heavy growth in the first part of the season. Unless stock are provided to utilize this flush of herbage, much of its value is lost since once it begins to go into head it becomes very woody and unpalatable. This has been very strikingly confirmed by nutrition experiments conducted by this committee. Allowing the grasses to go into head not only reduces their value but in turn the tall growth prevents the development of the wild white clover which has such beneficial effects on a sward.

Soil and fertilizer investigations have shown a general lack of the usual fertilizer elements but particularly a tremendous deficiency in phosphorus, over a wide area. A study has also been made of what happens to fertilizers when they are applied to the soil. This shows that the mineral elements (phosphorus and potash) are very quickly taken up by the soil and are in no danger of being washed away. It is therefore possible and advisable to apply a fertilizer like superphosphate or an 0-16-6 in the fall without any danger of leaching.

Present Activities:

During the past few years the activities of this committee have been changed somewhat. Experiments have been established in a nearby field where more detailed studies could be made of known seeded mixtures and equally important, where reliable methods could be developed to determine the nutritive worth of such mixtures. Most previous experiments of this sort have used the lawn mower to simulate the grazing animal. Unfortunately, the lawn mower doesn't act like a steer or a cow, either in what it harvests or its effect on the sward. Accordingly, steers, under rigid control, are being used to act as lawn mowers and the effect recorded on the establishment of the various seeded species. In the same way, live weight gains and carrying capacity are gross measurements of nutritive worth. Other methods are being sought to more clearly reflect this value. Extensive chemical analyses are also associated with this experiment. The ordinary feeding-stuffs analysis, while reasonably adequate for dry feeds, does not express the true value of green herbage. Attempts are being made to bring these more in line with the biological value of herbage.

Two grazing trials are being conducted with steers — one in Stanstead and the other in Sherbrooke county. These involve areas of eight to ten acres each where the fields are divided — half fertilized and half carried as a check. The stock on each section are weighed monthly to determine the value of the treatment.

Recognizing the need for pastures supplementary to the permanent grazing areas a set of five trials of an acre or more were established in the spring of 1941, utilizing the relatively new form of white clover known as Ladino. This clover, along with a suitable grass mixture, is seeded in spring with oats and grazed when the oats have reached a height of four or five inches and thereafter periodically throughout the summer. Ladino is a perennial having a stem that lies quite flat on the ground and which roots at intervals. It makes a very rapid early spring growth and may fill a useful place in Quebec agriculture.

Owing to the extreme variation in the types of pastures found, it has been very difficult to make specific recommendations for the multitude of different situations existing on farms. Various attempts have been made to classify pastures but in the absence of soil surveys these have not been too successful. With the soil surveys now completed for a considerable portion of the province, a concerted effort is being made to effect such a classification. The pasture workers at Ste. Anne de la Pocatiere and the Quebec Department of Agriculture are cooperating fully in this endeavour. The primary objective is to locate and zone the natural pasture types and determine as fully as possible for each of these the most economical treatment. In effect, such a survey will show the pasture resource of the province.

In these strenuous times and the even more trying ones that are sure to follow, more and more precise information will be required about all farm production matters. Since pastures are recognized as providing the cheapest form of milk or meat production, any investigation that will lead to their more rational utilization is surely warranted.

PEP UP YOUR PASTURES WITH C-I-L FERTILIZERS

Pasture improvement experiments with C-I-L Fertilizers on hundreds of Canadian farms show the following important results:

(1) Stock-carrying capacity of pastures doubled. (2) Longer grazing season — saving in barn feeding. (3) Better grasses encouraged, and clovers increased. (4) Herbage more palatable — richer in protein and minerals. (5) Livestock healthier, more vigorous and productive. (6) Twice as much milk, beef, mutton per acre. (7) More land becomes free for hay or cultivated crops.

Soil fertility varies in different parts of Canada, so give us full details of the problems which arise in your area, and we will send you information about C-I-L Fertilizers best suited to your own particular requirements.

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Three year old class — Pouponne Arthee, owner, Alphonse Turgeon, St. Alexandre, Que. 10,922 lbs. milk, 449 lbs. fat ave. test, 4.11% fat.

Two year old class — Boisbriant Babbling, owner, Dr. J. L. Todd, Senneville, Que., 8,132 lbs. milk, 453 lbs. fat, ave. test, 5.57% fat.

Honor Roll—305 day division

Mature class — Ascot Emma's Mimic, owner, William Clark Estate, Shawbridge, Que., 11,333 lbs. milk, 476 lbs. fat, ave. test, 4.20% fat; Lilac 2eme, owner, J. E. Rioux, St. Arsene, Que., 11,231 lbs. milk, 459 lbs. fat, ave. test, 4.09% fat.

Three year old class — Thorncroft Leto's Hyacinth 2eme, owner, Ecole d'Agriculture, Ste. Anne de la Pocatière, Que., 11,963 lbs. milk, 467 lbs. fat; St. Sulpice Manon, owner, Ferme des Trois Ruisseaux, Oka, Que., 9,630 lbs. milk, 436 lbs. fat. ave. test, 4.53% fat.

A POSSIBLE SOURCE OF FARM LABOUR

The employement offices of the Department of Labour will be on the look-out for possible farm labourers this summer. These offices are maintained jointly by the Federal and Provincial Governments and Mr. Godbout has made arrangements with the authorities of the Department of Labour to offer work on farms to suitable unemployed men who come to these offices looking for work.

Anyone who needs extra help this summer should get in touch with the nearest Provincial Employment Bureau, where the names of likely prospects will be on file. This action on the part of the government may serve to bridge the gap between farmers who need men to work in the fields and unemployed men and women in the cities who need work to do. It cannot be expected that these men will all be experienced farm hands, but under present conditions, we take what is available and do the best that can be done with the material at hand.

PLANT PROTECTION SOCIETY MEETS

The 13th annual meeting of the Quebec Society for the Protection of Plants was held at Quebec last month. At the meeting it was decided to publish an official list of plant diseases and to undertake a survey of all diseases attacking farm crops in this part of the country. Mr. L. S. McLaine, Chief, Plant Protection Service, Ottawa, was elected president for 1941-42; C. Perreault and Rosario Dube vice-president and secretary respectively.

APPLES SHOULD BE THINNED SOON

A few of the outstanding benefits obtained from apple thinning are large and better coloured fruits, fewer culls and fewer broken trees. It is these desirable features combined which enables the thinned tree to produce a better crop of finer quality than the unthinned tree.

Many varieties of apples set more fruit than they can bring to maturity in a good marketable condition. Improving the cultural condition and orchard practices will affect this very little and unless a large proportion of the fruit is removed while quite young the apples will be small and the tree may suffer unnecessarily. Also, many old or mature trees, or trees growing in sod, are likely to produce smaller fruits unless the number on the tree is reduced by thinning.

Commence thinning immediately after the June drop by working first on the heaviest laden trees. Pay particular attention to such varieties as Crimson Beauty, Yellow Transparent, Duchess, Melba, Joyce and Lawfam. Do not be afraid to thin out the fruits, especially if the tree is heavily laden. Beginners are likely to err more often in the direction of thinning too little than thinning too much. The apples should be spaced individually about 5 to 6 inches apart. To thin grasp the stem of the small green apple between the thumb and forefinger and push off the apples with the second and other fingers. In this way the strain is not put on the spur and the stem is left attached. If the apples have been allowed to size fairly well before thinning, then do not drop the thinnings through the tree as they will bruise the apples remaining on the trees. Throw the thinnings behind you and into the open spaces as they are removed.

Remove all specimens which are small, malformed or defective and hidden by branches. Where the apples are inclined to cluster leave only one fruit, the centre one if possible.

Also, where the fruits touch, be sure to remove all which are touching. However, if a few apples are close but not touching and with an accompanying large leaf surface they may be left as, in all likelihood, they will size up quite well.

One thinning is usually sufficient if enough fruit is removed at the first thinning.

C.S.G.A. MEETING

The programme for the annual meeting of the Canadian Seed Growers' Association is as follows:

Monday and Tuesday, June 16 and 17 — Meeting at Macdonald College of directors and of plant breeders.

General meeting June 18 and until noon on June 19. The delegates will have lunch at the Oka Agricultural School, with a banquet in the evening, at which the speakers will be Hon. Adelard Godbout, Premier and Minister of Agriculture for Quebec, and Mr. Gardiner, Federal Minister of Agriculture.

Farmers' Account Book

Provides a convenient means of keeping accurate day-by-day records of costs and income from each of your farming operations. There are sections for your year-end inventory, live stock service records, crop yields, etc. You will find it a valuable help in the administration of your farm.

For copies of this free booklet address requests to The Royal Bank of Canada, Advertising Department, Head Office, Montreal.

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INFORMATION AND WHERE TO GET IT

How to Build an Insulated Milk Cooling Tank. Stencil No. 10 by Prof. L. G. Heimpel, Macdonald College, Quebec. - 15 cents.

Tank sizes, insulation, and drains for cooling tanks that can be made on the farm. These units are adapted to the use of electrical refrigeration units or ice. Construction details are explained for the building of the concrete forms, the sealing of the insulation and the making of the tank cover. Materials required for each size of tank, cement, gravel, sand and bolts, are listed in the publication.

Soldering. Bulletin No. 57 by F. G. Behrends, Cornell Extension Service, New York State College of Agriculture, Ithaca, New York State, U.S.A. 15 cents.

The operation of soldering is explained and a list of the fluxes necessary for each type of metal is given. Illustrations show how to solder holes in tinware, put on tin patches, mend copper pipe, tinning the soldering iron, and many other jobs in the soldering line. Blow torch operation and troubles are also discussed.

Binder and Knotter Troubles. Bulletin No. 10, by Prof. J. Macgregor Smith, Agricultural Engineering Department, University of Alberta, Edmonton, Alberta. - 25 cents.

The operation of binder knotters and the repair of binder knotters is explained. The parts of the knotters requiring adjustment are well illustrated for every make of binder sold in Canada. Without exception this is the finest publication on binders that there is on the continent.

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STRIPPINGS

by Gordon W. Geddes

We are ready to admit that the process of evolution is slow. After twenty-five years spent in always teaching our calves to drink from a pail, the newcomer's nose still persists in turning up instead of down into the bucket. Now some men say the calf is right. Its head should be up when it drinks to get the milk in the right stomach. They offer a pail with a teat to feed them that way. It's hard enough to keep an ordinary one clean.

* * *

Did you notice the makeup of the delegation which presented the manifesto of the Canadian farmer at Ottawa? Seventeen members came from the West, five from Ontario, one from Quebec and one from the Maritimes. Our special worries won't get attention that way neither will we get the fuller understanding of farm problems in other sections that is essential to a complete farm organization. We're the only ones who can do anything about it. Our French confreres in the U. of C. C. and the Cooperative Federee are away ahead of us. They're already in the Federation of Agriculture. Perhaps the district meetings of the Farm Forums may start the ball rolling here.

* * *

We have criticized rail grading for omitting the important angle of transmitting the "inside stuff" about his hogs disclosed by the rail grade back to the farmer. That's the only way he can tell what he should do to improve his hogs. Now Canada Packers say they do it and sent a sample grade slip which proves it. It tells the farmer whether weight, feeding or breeding is the cause of off grades. Incidentally, the hogs from 200 to 210 lbs. live weight are the only ones to give the required 140 to 170 lbs. on the rail at all percentages of yield. Now we're wondering why the Canadian Livestock Cooperative doesn't give us the same sort of grade slip. As a farmers' concern, it should be especially interested in improving hog quality. Also we're wondering why they insist on paying through the Bank of Montreal whose branches are almost as scarce as hens' teeth in many districts. Small details all count.

* * *

Wish we could have some of that warm weather we had in April when we should have been sugaring. The May frosts would have been more useful then too.

* * *

You should be well started haying by the time this is printed. We may not but still you should. It's the early hay that counts. Incidentally, if we get some of the rain we should have had before this just at haying, you may want to make some hay silage. If you do some information from the U.S. Department of Agriculture may come in handy. They say one can make good hay silage without any preservative if it's done right. This means cut it short (¼ in.), keep the air out, don't let any holes open up around the sides on top, cut in some heavy green stuff last and watch the moisture content. Grasses cut after blooming and cereals may be put in right after cutting like corn. Immature grasses and legumes need to be wilted about two hours on a hot day or longer on a slow one. Don't cut them in wet with rain or heavy dew. Sixty-five per cent moisture is best but 50 to 55 is safe. The worst that may happen is a bad-smelling silage; it is almost sure to be edible.

* * *

Why spend time and money on a preservative just to counteract the effects of too much moisture? It only means heavier stuff to handle, more strain on the silo and seepage from the silo which in turn means waste. However if there is seepage, it should have a chance to escape. Don't try to keep it in. The flies may be disappointed if you don't use molasses but your own temper is apt to be sweeter. Of course a little molasses on hand will enable you to keep going in weather when you can't get the moisture content down. Sometimes we like an excuse not to keep going though so many jobs accumulate that rainy days are often the busiest ones.

THE QUESTION BOX

Have you any problems that are bothering you? This column is at your disposal. Address your questions to the Editor, Macdonald College, P.Q.

Question: Several years ago when my silo filler was new, it lifted silage very easily but now it has to run much faster to keep the pipe from clogging. The knives are sharp and the shear plate is ground and adjusted.

Answer: A silo filler that is several years old may fail to lift silage because the tips of the fan blades have been worn off by the silage. Ordinarily blades should be long enough so that there is only 1/16 to 1/8 of an inch clearance between the tip and the fan housing. This trouble may be cured by adjusting the fan housing closer to the blades, or by building up the tip of the blades by welding.

Some silo fillers have the lower section of the fan housing so arranged that one end of it can be raised up to reduce the clearance caused by the wearing of the blades. When moving the lower housing up, set it so the blades have 1/16 of an inch clearance at the tips and do not rub on the sides of the housing.

When there is no adjustment on the housing the blades must be removed, taken to the welding shop and built up to the proper length. Before removing the fan blades, use a ruler to find out how much they need to be built up and still have the proper clearance. On returning the blades to their places on the wheel test them to see if they are the proper length. If they come too close to the fan housing, remove them and grind them off with an emery wheel.

Blades that are riveted to the wheel are not easily repaired. In this case some farmers have found that it is as easy to take the whole silo filler to the shop on a wagon as to take out the cutter wheel. When the machine is taken to the shop the welder can test the clearance of each blade as he builds up the tip.

WHAT IS 'ONE HORSE POWER'?

One horse power is developed when a horse pulls a load of 150 pounds and walks at a speed of 2½ miles per hour. This standard, which is called one H.P., is said to have originated in England where horses were used to pull buckets of coal out of a shallow coal mine by means of a single pulley above the mine and a heavy rope which was fastened to the single-tree attached to the harness. It was found that an average horse could work all day if he pulled up a 150 pound bucket and walked 2½ miles per hour. When two horses were used to pull a 300 pound bucket, 2 H.P. were developed.

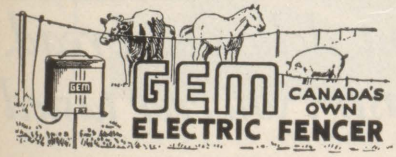
Today horses are about the same as in those days and the average horse today can only be loaded with 150 pounds if he is expected to keep it up for several hours. For example, a light two-horse grain drill requires a pull of about 300 pounds, that is, 2 H.P. at 2½ miles per hour.

What is a tractor Horse Power? It is exactly the same thing. If a tractor is developing 10 H.P. when going 2½ miles per hour, it will be pulling 10x150 pounds or 1500 pounds. If a person wishes a tractor to move faster, then to pull the 1500 pounds at 5 miles an hour would require a tractor that develops 20 H.P.

There is, however, a difference between tractor power and horse power. Some one may say, "Ten horses like my Prince could pull the wheels off one of those small tractors." There is this difference; one horse can knuckle down and develop about 6 H.P. if it pulls the load only a few feet and then takes a rest. A tractor will not do this but it will pull its rated load all day and if necessary all night without rest, no matter if the weather be hot or cold.

Blades of an ensilage-cutter should not be hollow ground by a small emery stone when they are sharpened. By adjusting the position of the knife as it is being ground, it can be given a straight beveled edge, which will make the blade stay sharper longer and wear much longer.

Why Fence Your Whole Farm?



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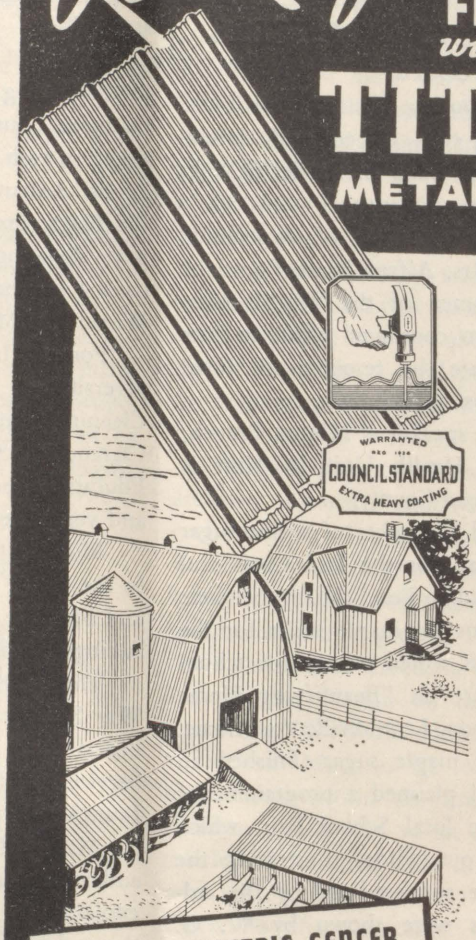

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THE WOMEN'S INSTITUTES PAGE

A section devoted to the activities of the Quebec Institutes and to matters of interest to them

Q.W.I.'S ELECT COUNTY OFFICERS

by **M. E. McCurdy**

May is the month in which Quebec Women's Institutes hold County Conventions, and elect officers and choose convenors for another year. Miss Edna B. Rettie, Q.W.I. Demonstrator was present at these meetings.

At the twenty-first annual convention of Argenteuil County the guest speaker was Mrs. Alfred Watt, President of the Associated Country Women of the World. Mrs. Watt urged the Institutes on to continued effort in war work, asking them to coordinate the resources of time, strength and means to the utmost to this end.

Mrs. Grant LeBaron was the speaker at Minton Branch, her subject being the County Health Unit. A Unit is considered a possibility in Stanstead County.

Belvedere Branch forwarded 111 cakes of maple sugar to the Navy, finished an afghan for the Red Cross and voted $5.00 to the Queen's Canadian Fund. Milby members made personal cash contributions for maple sugar for the Navy, sewed for the Red Cross, voted money for school prizes, and listened to a lecture on "Beautifying Home Surroundings" by W. G. Robinson, Lennoxville Agronome. Lennoxville sent 7 pounds of maple sugar, finished an afghan for the Red Cross, and planned a programme of pictures for the benefit of the local School Fair, which was later successfully carried out. Slides illustrating the improvement possible to home surroundings by the cultivation of flowers and vines were shown by W. G. Macdougall, Lennoxville Agronomist.

A talk on the cultivation of roses by Mrs. Holmes was a feature of the meeting at Way's Mills. Three quilts were forwarded to the Red Cross, maple sugar was sent to the Navy and clothing for British Air Raid Relief, was sent to the Salvation Army in Montreal to be forwarded overseas.

Spooner Pond Branch arranged for a quilting bee, and held a successful auction of plants and slips. A timely address by W. G. Macdougall, of Lennoxville, on "Home Gardens" was a feature of the meeting.

Dixville held a social for the benefit of the Red Cross and a tea for the Refugee Fund.

Frontier Branch contributed 100 per cent to the W. I. war effort, held a contest and listened to an article on "The Ancient Art of Cheese Making." Lakefield Branch used War Stamps as prizes in a benefit card party, held a sale and an exchange of seeds and slips. Lachute reports a donation to the War Service Fund. Pioneer Branch studied the raising of annuals and Upper Lachute heard a paper on the Wild Life of Canada, and exchanged seeds and bulbs.

A total of 567 knitted, and 486 sewn articles was completed during the past year by the Women's Institutes in Gatineau County for Red Cross use. The sum of $375 was raised in cash by this County, to be applied to war work.

St. Armand Branch sent 15 pounds of maple sugar to the Navy, exchanged plants and slips, held a sales table, gave donations to the self-denial fund, held a vegetable contest and heard a paper on "Changes in the Agricultural World" by Mrs. H. Sornburger.

Pontiac Institutes had talks and papers on a wide diversity of subjects, as Care of House Plants, House Cleaning hints, and others, at Beech Grove, Education at Clarendon, Shawville, and Stark's Corners; the Adult Education and Central School Board System, at Wyman; and vegetable food values in the Bristol Busy Bees Branch.

Most of the Branches in this County sent maple sugar to the Navy, boxes to overseas boys, and forwarded quilts and blankets to the Red Cross, as well as purchasing War Savings Stamps.

Three Branches in Richmond County have purchased War Savings Stamps, and contributed to the Q.W.I. Self-denial fund. Melbourne Ridge voted $10.00 to the War Service Fund, and sent quilts to the Red Cross. Shipton Branch also provided quilts for this purpose.

Many of the Branches are co-operating with the authorities in the Salvage Campaign. The subject was explained in Cowansville Branch by Mrs. McOuat, and at the same meeting Mrs. Bruce Miner spoke on the care of seeds and bulbs.

Stanbridge East had several educational talks, one on the subject of Greece, and another on Canadian Bird Life.

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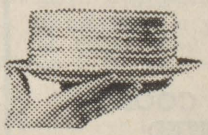

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IF IT'S "OGILVIE" — IT'S GOOD

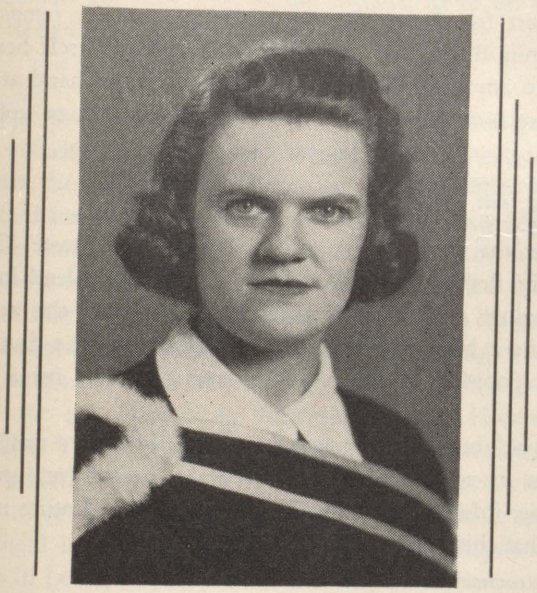
A talk on the Larger Administration Unit in Rural Education was a feature of the programme in Brookbury Branch.

Stanstead County has been sponsoring a County-wide spelling contest for several weeks, in which many of the leading schools in the County are participating. A try-out covering three schools, North Hatley, East Hatley and Massawippi was held at North Hatley, the winners to compete in the County contest to be held later.

Members of Inverness Branch contributed maple sugar for the Navy, voted $3.00 towards the local School Fair, and arranged to hold a play shortly.

Beebe Branch heard correspondence read from a Scottish member of an overseas Institute, in which appreciation of Canadian gifts of garden seeds was warmly expressed. "Trees" was the subject of study at the meeting, and was illustrated in an exhibit of a beautiful hand-made inlaid table, which contained over sixty kinds of Canadian wood, made by Mr. Brevoort. A paper on trees was given by Miss Macdonald, and the meeting closed with the singing of the "Maple Leaf Forever".

NEW Q.W.I. DEMONSTRATOR



Miss Roberta Scott of Scotstown, Que. has received the appointment of Demonstrator for Quebec Women's Institutes from the Quebec Government, succeeding Miss Edna B. Rettie who served as Demonstrator for the past year and who is leaving to be married.

Miss Scott holds the degree of B.H.S. from Macdonald College where she specialized in this subject. She held several offices of responsibility in College societies, has had an experience covering six years in leadership in girls' camps in Quebec and Ontario, and served as dietitian for two years.

Miss Scott took over her new duties on June 1.

PARENTS AND CHILDREN

by Mary Avison

This column will welcome comments or questions on the problems it deals with, or on others that arise in every normal home.

VACATION TIME

"Only ten more days to holidays: Hooray!"

Mother smiles, remembering how glad he was to have school start last autumn and wondering how soon he will say: "What can I do now?" or "Aw gee, there's nothing to do 'round here!" When this happens, as it does in most families sooner or later, it is time to take stock of our thinking about holidays and to discover if we have slipped back into the idea that vacation doesn't matter, that school work is enough to worry about. I find that I need to remind myself regularly — and perhaps we all do, especially at the beginning of summer holidays — of several important facts.

First and foremost: Now that school is out and teachers are away, a much greater responsibility falls on parents for their children's life and activities than in term time when we turn them over to the school for so many hours of each week. If planning, organization and supervision are to be given, *we* have to give it. If we do not, these months become periods of freedom without direction or purpose. Instead they should be days that recreate energy and interest, ambition and enthusiasm for the year ahead.

Second: Much as we love freedom, we only enjoy it to the full within the limits of "law and order". Of children this is true in an even greater degree. I am reminded of the small child in the progressive nursery school who asked: "Must I *always* do what I want to do? Can't I ever do what I'm told!" Children need routine, orderliness, supervision, as a rest from the burden of making choices and decisions, and from the strain of accepting responsibility for these. Therefore, let our vacation days be set within an orderly plan, different from school days, less rigid, more variable, but nevertheless supplying a framework within which freedom can be enjoyed. Regular meal hours, regular bed time, certain definite chores and responsibilities can help to supply this. Exceptions made for special outings and excursions will have more charm and delight because they are 'special'.

Third: In our thinking about our children's vacation let us remind ourselves that children learn not only in school but out of school; that growth — mental, emotional and spiritual as well as physical — takes place continually if not evenly; and that *all* of a child's activities and experiences are important because they all contribute to this growth. Let us never think of holidays, as I have occasionally heard them described, as "so much waste time" but let us fill them with a variety of experiences, activities and opportunities not possible in term time, such as will give

(Continued on page 27)

Fruits in Season

by **Celia Ferguson**

HAVE you ever tried rhubarb with strawberries in a pie shell? It is delicious. First bake a pie shell in the usual way. Cut your luscious pink rhubarb in one inch pieces, pre-cook it until tender, drain off the juice and arrange the rhubarb in the centre of the shell. Cut the strawberries in half lengthwise and arrange them around the outer part of the shell. Sprinkle all with a generous amount of sugar and a dash of lemon juice to bring out the flavour. Place in a hot oven until the strawberries are tender. Your family will ask for seconds of this dessert.

Diced fresh pineapple also holds surprises by the score when combined with fresh strawberries and sliced bananas. A large dab of whipped cream may be placed on top if you are looking for more calories.

If there is a birthday in your family during strawberry season, try this frosting for that very important cake.

2 egg whites
1½ cups water
½ tsp. salt
⅛ cup water
2 tsp. light corn syrup
½ cup drained sliced fresh strawberries

Put the egg whites, sugar, salt, water and corn syrup in the top of a double boiler. Place this over boiling water and cook for seven minutes, beating it continuously with a rotary beater. Remove the frosting from the fire and continue the beating until it will stand up in peaks. Add the fresh strawberries, saving a few with which to decorate the top of your cake.

Now we have a rival for the old fashioned fruit shortcake invading our recipe file. It is the gingerbread appearing in new trappings. You simply split a piece of gingerbread in half crosswise and cover it with slices of fresh peach and a sprinkling of sugar. Place the other half on top, add more peach slices, top with the traditional whipped cream and presto, you have "Gingerbread Peach Shortcake."

When peaches are abundant it is your cue to serve fresh peach ice cream.

2 cups milk
1 cup sugar
1 tbsp. flour
2 cups light cream
1 tsp. vanilla
⅛ tsp. salt
4 egg yolks, slightly beaten
1½ cups sieved fresh peach pulp
¾ cup sugar

Scald the milk in a double boiler. Mix together the sugar, flour and salt. Add this mixture to the scalded milk and cook for five minutes, stirring constantly. Add a small amount of this mixture to the slightly beaten egg yolks and return this to the mixture in the double boiler. Allow to cook for five more minutes. Cool. Combine the ¾ cups of sugar with the sieved fresh peach pulp and add this to the first mixture. Add the vanilla and cream. Turn the ice cream mixture into the scalded can of your freezer. Cover tightly. Adjust the dasher so that the handle turns smoothly. Fill the surrounding tub with alternate layers of cracked ice and coarse salt until three-quarters the way up the sides of the can. Turn the handle slowly and steadily until resistance is felt, then turn rapidly for about fifteen minutes. Drain off the excess water, wipe off and remove the cover. Take out the dasher and scrape the ice cream down from the sides of the can. Replace the lid and plug up the hole with a cork. Repack with ice and salt in the proportions of three parts ice to one part salt. Cover completely with a piece of heavy canvas or burlap and allow to stand for three to four hours. This yields approximately two quarts of ice cream.

Speaking of peaches — have you ever tried baking one? Peel six large peaches. Cut them in halves and remove the stones. Fill each cavity with one teaspoon sugar, one quarter teaspoon butter, a few drops of lemon juice and a sprinkling of nutmeg. Bake these in a moderate oven for about twenty minutes and serve them hot or cold with cream, as a dessert. For variety you may cover each half with a meringue and a little shredded cocoanut and then bake them.

When guests arrive unexpectedly and you have to produce a dessert for dinner on a few minutes notice, remember this Fruit Batter Pudding and try it. It lends itself beautifully to any fruit that you happen to have on hand at the time, such as blueberries, strawberries, peaches or apples.

1 cup flour
½ cup sugar
⅛ tsp. salt
2 tbsp. shortening
2 tsp. baking powder
½ cup milk
1 egg
4 cups stewed fruit

Stew the fruit until tender and sweeten to taste. Combine the flour, sugar, salt, baking powder and blend in the shortening. Add the milk and beaten egg. Place the stewed fruit in a baking dish. Drop the batter on the fruit by large spoonfuls. Bake in a hot oven (350°F) for a half hour.

If you are one of those lucky people who have raspberry bushes in your garden, you have the perfect set up for making "Magic Raspberry Pie." The magical feature is the fact that this pie requires no baking.

1 lb. commercial Graham wafers
1 cup sweetened condensed milk
¼ cup lemon juice
1 pt. raspberries
½ cup heavy cream
2 tbsp. powdered sugar
1 tsp. vanilla

Line an eight inch pie plate with "Graham Wafer Pastry," made by crushing the commercial graham wafers into fine crumbs. Cover the bottom of the pie plate with wafer crumbs and stand up whole wafers cut in halves around the sides. Combine the condensed milk and lemon juice, add the raspberies and turn into the prepared pie shell. Whip the cream and add powdered sugar and vanilla. Top the pie with whipped cream. The approximate yield is six portions.

Orange squash. Children love it! — Just mash and beat a banana into a glass of orange juice and it's a "squash."

DESIGNS FOR LEARNING

"Travel opens the mind; but so does print; and print is the cheapest mind opener there is, and the best."
— John Cotton Dana.

"WE HAVE LABOURED UNENDING"

Scratch a farmer and you find a hard working man. It's redundant to talk about it. In the barns and out in the fields, it's work day and night. Ploughing, seeding, milking; a million and one things have to be done to produce the country's food supply. There is no unemployment on a farm.

Scratch a farmer's pocketbook and you find fluff. Dig deep down and you'll produce a few coppers. Exactly thirty-nine coppers on every consumer's dollar.

Scratch your head and think about that. That's what many farmers have been doing. There's been some mental seeding and cultivating done too, and there's a crop coming! A lot of farmers have sat down and discussed their problems, trying to come to conclusions. They thought it was just as important to figure out why 33 percent of the population got only 9% of the income, as to do chores, and to figure out what they could do about it.

Community Meetings

For twelve weeks groups of farmers in this province (as well as other provinces) argued the problems of agriculture. Small committees composed of these groups as well as other interested people called four Community Meetings in the territory south of the St. Lawrence. The first one was held in the High School at Cowansville on the 26th day of May. This meeting took in farmers from the counties of Shefford, Missisquoi, and Brome. A meeting was held in Ormstown Consolidated High School on the 29th of May for the farmers in Chateauguay and Huntingdon counties. The third evening meeting was at the Richmond Town Hall for the county of Richmond. It took place on the 3rd of June. On the fourth of June a picnic-meeting was held in the afternoon at the Dominion Experimental Farm in Lennoxville. Farmers came from the three counties of Stanstead, Compton and Sherbrooke.

Speeches were short and to the point. The main speakers at the four meetings were Professor Hamilton of Macdonald College and Mr. Henri Bois, of the Co-operative Federee. Mr. P. D. McArthur presided at the Ormstown meeting and spoke at Lennoxville.

The larger part of the evenings were given over to the Farm Forums. The members of those forums brought up the question of prices for farm produce and operating costs. The need for more cooperative societies was stressed, and in several communities, groups of farmers are going to do something about starting the necessary cooperatives. The most important idea that arose from all the meetings, was the necessity of a farm organization in Quebec to speak for the farmers in one strong voice.

The Ormstown meeting on May 29th was typical in its enthusiasm and attendance. About 100 people were present. P. D. McArthur as chairman struck the keynote when he said "We are at war and must therefore be more serious about all our problems." Gordon Adamson representing the Adult Education Service presented an appropriate film "The Lord Helps Those Who Help Each Other", and announced the Farmer's conference for June 9th.

Prof. Hamilton spoke of the contribution of the College to the solution of farm problems. Henri Bois in the course of his address on Cooperatives said: "It is up to the farmers to decide how and when to act and to accumulate the capital they need. Both Cooperatives and Credit Unions must be built, managed and supported by those who are to benefit from them."

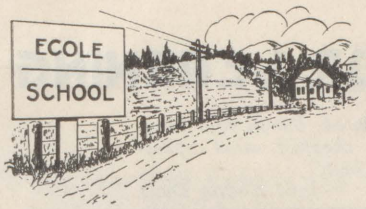
Enthusiastic reports of the farm forum groups were presented by the secretaries. Discussion was general, with agronomes April and Nadeau as well as several farmers contributing. Dr. J. Quentin spoke on plans for the Victory Loan drive, while Principal David Munro, of Ormstown Academy was the genial host to the meeting. It was in the fullest sense a community gathering.

Provincial Conference

Plans were made to assemble all the forums in the province, as well as other interested farmers, at a provincial meeting at Macdonald College on the 9th of June, the first day of the agronomes' meeting there. At the Community Meetings each forum selected two delegates and each county was allowed three extra delegates. The forums north of the St. Lawrence, where no Community Meetings were held, also participate on the same basis. Visitors were invited to come to the college for the afternoon meeting. Before these lines are printed the provincial conference will have been held.

From Now On

Out of these beginnings a Quebec farm organization is growing, uniting the existing groups and making new ones where there were none before. The members of this organization are pledged to study — and to act. From now on more and more farmers will count in their chores the necessity of studying their many problems and acting together to solve them.



SCHOOL PROBLEMS AND VIEWPOINTS

First Annual Macdonald College Music Festival

by **Dean Sinclair Laird**

SAMUEL JOHNSON stated — "Of all the noises, I think music the least disagreeable", and Shakespeare said —

"The Man that hath no music in himself,
Nor is not moved with concord of sweet sounds,
Is fit for treasons, stratagems and spoils!
. . . . . .
Let no such man be trusted."

The average person probably has an opinion midway between these two extremes.

Ancient Greek education consisted mainly of "music" and "gymnastic" — music for the soul and gymnastic for the body. The word "music" in these old days included all that was alleged to be under the jurisdiction of the nine Muses. These mythological persons represented Poetry, History, Music, Tragedy, Comedy, Dancing, Astronomy and other forms of literature and song. Today, the word "music" has narrowed its meaning to cover only vocal and instrumental music which still plays a large part in modern education.

Music has attained increasing importance in recent years by the revival of music festivals in Montreal where music is taught in schools by or under the direction of specialists. But in May 1941, the first music festival for schools outside the metropolitan area was held at Macdonald College through the initiative of Mr. Frank Hanson, Mus. Bac., L.Mus., Lecturer in Music in the School for Teachers. Over four hundred children participated in this event from the neighbouring schools, namely, Hudson High School, Macdonald High School, Cedar Park Intermediate School, Pointe Claire, Lachine High School and the School for Teachers; and the performers included pupils from kindergarten to Grade XI, and student-teachers. The programme consisted of fifteen items by various classes, each item consisting of two numbers except in the case of the Hudson Percussion Band which played three numbers.

The importance of this first music festival is shown by the fact that it was easy to enlist the co-operation of Dean Douglas Clarke of the Faculty of Music, McGill University, and Mr. R. de H. Tupper, Secretary of the Conservatorium of Music, McGill University, who acted as adjudicators.

Naturally, there were difficulties to overcome, but these were soon surmounted by the good will and interest of the various superintendents, principals and class teachers. The children were brought to the College Assembly Hall by bus or motorcar. The programme started punctually and continued without the slightest interruption until Dean Clarke gave his talk on the strong and weak points of the music.

Apparenly, the songs were well chosen, varied and suited to the voices of children, except "The Lost Chord" which was supposed to be the least suitable, probably because of the necessity for adult voices and appropriate volume. In spite of this criticism, however, it was excellently rendered by the children of the Macdonald High School Choir.

Perhaps the greatest hit was made by the Percussion Bands from Hudson and Macdonald High Schools. These made a great appeal to the audience and received high praise from Dean Clarke who particularly congratulated the drummer on the excellence of his time, rhythm and technique.

There were still other features of this festival which are worthy of comment:

(1) The conductors were not specialists but were either the class teachers or student-teachers or pupils. Similarly, the accompanists in some cases were school pupils.

(2) No child was kept out of his group because of being tone deaf or backward in music. All the children of the class took part and thus gave a good idea of what was being done in regular class work by non-specialist teachers and ordinary children.

(3) These children received only the regular instruction prescribed in the course of study from non-specialist teachers who chose the selections that were to be sung by their classes and did not choose special songs to be rehearsed and rehearsed "ad nauseam" in training for a competition.

(4) There were no awards and no prizes. Thus the competitive element was absent and the audience listened to what might quite well be an ordinary performance in school hours.

(5) The children understood that they were singing for their own enjoyment and the pleasure of the audience; the emphasis was on the educational value of music and not on the winning of prizes. Naturally, it would be hard to select any particular group as the winner because their ages and educational stages were so varied.

(6) Many of the arrangements were handed over as a responsibility to student-teachers who took charge of what

might be called the stage management and administration of the festival. They acted as ushers and supervisors of the children, handled the publicity and distributed the programmes. The fact that there was no hitch in any of the arrangements shows that these duties were undertaken seriously and successfully in a co-operative spirit as an "enterprise" in the modern manner in connection with extra-curricular activities. It was indeed good training for them.

(7) The audience and the student-teachers who were mostly interested in this festival have been shown what can be done and is actually being done in grades of ordinary schools by the regular teachers. Young teachers will thus have an idea of what might be expected from them in their schools next year. Thus the value of this festival and its influence in music will spread to all parts of the province.

(8) Dean Clarke made some general estimates of the success of the evening which had impressed him deeply and which he had enjoyed thoroughly. He then proceeded to give some definite criticisms and suggestions regarding the various items on the programme, pointing out the presence or absence of clear diction, unified tone, spirit and verve, suitability of selections, correlation of the spirit of singing with the words and music, and, in addition, the points that needed still further emphasis to reach a higher standard.

The success was so great that hopes have been expressed for an annual festival which may even be extended in future years to include school choirs, church choirs and instrumental music. Experience with this first festival naturally suggests some improvements. One of the defects was that because four hundred children took part and the hall was largely required for the audience, many of the children had to be accommodated in other rooms while their services were not needed. They therefore missed some of the items which they should and would have heard if the College Hall had been large enough to seat them all during the whole performance. Perhaps in future years it may be possible to have two performances and allow the children to get the benefit of the whole programme instead of a brief part of it when they themselves are on the stage.

On the whole, this first festival was a great success, and it is fitting that it was held at Macdonald College where so many young teachers are receiving their training to fit them as grade teachers throughout the length and breadth of our Province.

We require local agents in a few districts. Good money can be made selling subscriptions to the Journal on a commission basis. If you are interested write to the Circulation Manager, Macdonald College Journal, Macdonald College, Que.

PARENTS AND CHILDREN

(Continued from page 23)

meaning and reality to much of the necessarily theoretical learning of school days.

Now is the time to plan and to do the sort of things that will give content and enrichment to history, geography, arithmetic, social studies and all the other book learning that fills so many school hours. I have seen arithmetic problems take on new meaning and 'sense' for the girl and boy who helped to paper a room or shingle a chicken house. I have known an excursion to a lumber mill or power plant at a water-fall give new interest and insight to the child struggling with physical or commercial geography; and the responsibility for planning, purchasing and cooking the family meals for a week, or for the carrying through from seeding to marketing of a flower or vegetable garden, add not only to a child's understanding of arithmetic, hygiene and the social and economic structure of our society, but provide the satisfaction of a real job tackled and completed.

Each family will think of many other undertakings which boys and girls will delight in if given encouragement and just enough wise direction and guidance to prevent their attempting enterprises too big for them and to make possible a successful outcome. Such enterprises do not necessarily mean long journeys away from home nor need they involve a large expenditure. Even the busiest parent can find time to initiate them.

FARMERS AIR THEIR PROBLEMS

The 16th issue of the "Food for Thought" Series is a report of the Radio Farm Forum project that covered all Eastern Canada this winter. The report is the work of men in each province and was written up in its final form by Neil M. Morrison. The pamphlet explains the set up of the project with a full criticism of the method and results. The conclusions of the farmers of Quebec and Ontario (which were recorded weekly) on the various problems aired are also included. The subtitle "An Experiment in Rural Adult Education" explains the contents more than the catchy title, for the whole process from the beginning of the job back in 1939 with listening groups on "Cooperation" programs and "Community Clinic" broadcasts in Quebec is traced to its maturity in this year's Farm Radio Forum. This is a valuable number of the Food for Thought Series and everybody should secure a copy to get a complete picture of the project. Send ten cents to the Rural Adult Education Service at Lennoxville, Quebec for one.

Home and School Council Meets

A meeting of the Quebec Provincial Federation of Home and School will be held at Macdonald College at 8.00 p.m. on June 26th, following the Women's Institutes Convention which is being held at the College on June 24, 25, and 26th.

All those who are interested in the work of Home and School Associations will be welcome to attend this meeting.

THE COLLEGE PAGE

News of the College — Staff, Students, Graduates

A Well-Loved Figure Passes

High esteem and deep affection for the memory of Miss Bessie M. Philp dwells in the hearts of all lovers of Macdonald College.

With some years of experience as a school teacher, a diploma from the Macdonald Institute at Guelph, and two years teaching in Household Science in the Braemar School, Vancouver, she was appointed to the staff of our School of Household Science in 1914, served under Miss Fisher and Miss Hill (Mrs. Whyly Baird), succeeded the latter as Head of the School in 1920 and retired in 1939. She remained in Ste. Anne de Bellevue to the end of her life, May 21st 1941. It was during her headship that Miss Fisher's dream of a degree course in Household Science was realized.

Miss Philp was a woman of fine culture, fond of nature, literature, music, art and all beautiful things. She delighted in the birds and wild flowers and knew them all by name. It was a fitting feature of her funeral that on a day of unclouded sunshine her body should be borne through the College grounds decked in the spring beauty of fresh grass and the bloom of lilac, honeysuckle and spirea, and melodious with the voices of the birds.

Her life was a constant struggle against ill-health. Friends say she never knew what it was to be really well.

Her character was a rare combination of gentleness, self-abnegation and firmness. She commanded by virtue of her personality and had little occasion for measures of discipline. Members of her staff with longer training in their specialties and a greater knowledge of the underlying sciences acknowledged her superior culture and served loyally under her leadership. Students who came before her either for reprimand, or for assistance, departed with a new vision of duty and of opportunity. Many of them came back after graduation to express a greater appreciation of her influence than they had realized in their student days. As Canon Whitley reminded the funeral congregation, this influence, by virtue of the wide distribution of our graduates, is one upon which "the sun never sets."

Gifted with a voice sweet, but resonant and a fine taste in the choice of words, Miss Philp was a public speaker of whom the College had just reason to be proud.

In her life she gave herself unsparingly for the benefit of her students, her friends and her community. The College, the Province and the cause of household science education owe her a deep debt of gratitude. The University which she served so long and so well has expressed its sorrow at her death in the following resolution:

"The Senate of McGill University records its profound regret at the death on May 21st of Miss Bessie M. Philp, for 25 years a member of the teaching staff and for 19 years Head of the School of Household Science.

"Miss Philp's modesty, aversion to publicity and instinctive good manners made it impossible for anyone but those most closely associated with her to appreciate fully the contribution she made to the School of Household Science. Her students will remember her with affection and with gratitude for the fine spirit that animated the school under her leadership."

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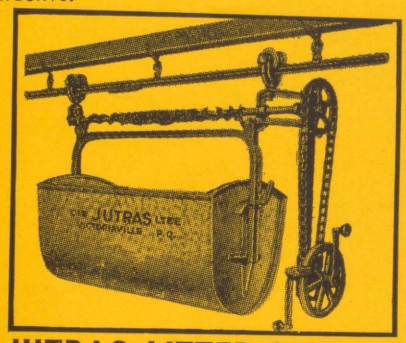

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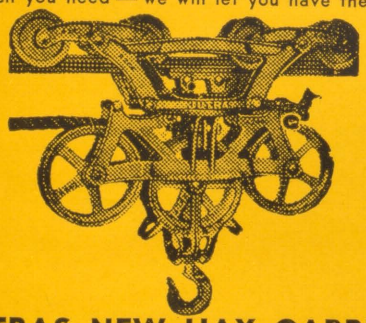

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THE MACDONALD COLLEGE JOURNAL

MACDONALD COLLEGE, QUEBEC

The Macdonald College Study Pamphlets

The Macdonald College Study Kits and the Canadian Farm Problems pamphlets may be ordered through the Journal.

These study outlines cover many fields of interest. They bring to their readers a realization of the problems facing agriculture, and offer some suggestions for dealing with them. A complete set will form a comprehensive reference library on the subjects discussed. Prices for the Study Kits are as follows:—

ANIMAL PRODUCTION SERIES: 5 outlines, 37 pages. With kit, 40c; without kit, 30c.

CROP PRODUCTION SERIES: 12 outlines, 85 pages. With kit, 80c; without kit, 70c.

NUTRITION SERIES: 6 outlines, 38 pages. With kit, 35c; without kit, 30c.

RURAL LIFE SERIES: 6 outlines which may be obtained free by residents of the Province of Quebec by writing to Dr. W. P. Percival, Director of Protestant Education, Department of Education, Quebec, P.Q. This is prepared particularly for the use of secretaries of study groups or other organizations. This series may be purchased for 80c by non-residents of Quebec.

Other series will be available shortly.

The CANADIAN FARM PROBLEMS pamphlets are 16 in number, and may be had for $1.00 for the complete set. The titles are as follows:—

1. Are there too many farmers?
2. Should Canada restrict the farming of sub-marginal land?
3. Will increased production benefit the farmer?
4. Should Canada encourage land settlement of immigrants?
5. Can we improve our taxation system?
6. How far will improved farm management methods help?
7. What does the farmer need in the way of credit?
8. Can the economic position of the farmer be improved through the medium of a government supported policy of research, experimentation and extension work?
9. What can we hope to accomplish through Fairs and Exhibitions?
10. Are government grading regulations and marketing services of value to the farmer?
11. What are the conditions necessary for the efficient marketing of farm products?
12. What can the farmer gain through organization?
13. To what extent can co-operative organizations solve the economic problems of the farmer?
14. Is any form of governmental control or regulation over the marketing of farm products necessary, desirable, or practicable for Canada?
15. If some form of regulation is adopted, what should it be?
16. What shall we do about it?